THE
MEDICAL AND SURGICAL
REPORTER.

No. 1954. AUGUST 11, 1894. Vol. LXXI—No. 6

ORIGINAL ARTICLES.

CONTRIBUTIONS TO OBSTETRICS AND DISEASES OF WOMEN.

[NUMBER THREE].

THEOPHILUS PARVIN, M. D.

CHILLS FOLLOWING UTERINE INJECTIONS.

Mrs. R., twenty-nine years old, was delivered of her second child after a normal labor, on April 14th. Her condition continued favorable until the afternoon of the 16th, when there was slight fever and there was also some tenderness over the left iliac region. The fever increased and the next day was so great and, having associated with it a sense of depression and mental confusion, some alarm was felt, and the physician in charge, from whose notes I have taken the preceding facts, and shall take others, had me visit the patient, some twenty miles from the city.

I found she had an offensive lochial flow, a pulse of about 100, and a temperature of nearly 103°. Believing the essential indication was to thoroughly wash out the uterus, I did so, employing for this purpose a fountain syringe and a warm mixture of creolin and water. The irrigation was made without the patient suffering pain, scarcely discomfort. She had been placed across the bed, her feet resting on chairs, for the operation. Thirty minutes after being replaced in her usual position, she had a severe chill lasting ten to fifteen minutes, and her temperature rose to 104°. I ought to state that in the fluid coming from the uterus during the irrigation there was a small fragment of the membranes, and also apparently a piece of placental tissue as large as half a small marble. The fever subsided somewhat on the morning of the 18th, but as the lochial discharge still continued to be somewhat offensive, upon visiting her in the afternoon I believed a second irrigation indicated, and accordingly it was given. This too, was followed by a more violent chill and the temperature soon rose to 105°; but the decline of the temperature was earlier and more decided than after the previous operation. On the 20th, I found her with a high temperature, considerable prostration and the lochia not yet entirely normal as to odor. It seemed to me that there must still be in the uterus some infecting material, and I determined to use the curette, employing therewith corrosive sublimate in the creolin mixture. I found in the discharge that occurred from the washing a partially decomposed clot probably the size of a small marble. Again the treatment was followed by a still more violent chill, and the temperature went above 105°. The fever continued, the temperature varying from 100° to 105° until the 21st, when it almost entirely disappeared. It returned, however, at night and continued through the 22nd; in the evening of that day another chill came during a profuse perspiration following the application of twenty minims of guiacol over the abdomen; the temperature during the chill reached 107°, lowering very soon after the cessation of the chill. The fever continued each morning on the 23d and 24th,

when it disappeared for twenty-four hours; but it returned the 26th, and continued during that and the next day; the temperature, however, was not high, when it entirely disappeared and uninterrupted and complete convalescence began.

REMARKS.

First, a word in regard to the unnecessary use of intra-uterine as an adjective for injections of the uterus. Uterine is sufficient without the awkward prefix; we never think of saying intra-vaginal injections, and yet the term would be equally appropriate with the former.

Next, here was a case of puerperal infection when all requisite antiseptic precautions had been taken by a wise and experienced practitioner; and such cases will occur again, so let us not be in haste to condemn the obstetrician who meets with such accident, notwithstanding all proper precautions.

But the essential point in the history, the sole reason for here presenting it, is the fact that the uterine injection was followed in each case by a chill. This was my first experience of the kind, though I have in many cases made use of such injections.

According to Silvestre, *Les injections intra-uterine, et les accidents provoquès par leur emploi én obstètrique*, 1892, states that generally the chill occurs during the first hour following the irrigation; 20, 30 and 45 minutes represent the intervals usually noticed—in one case the interval was an hour and three-quarters. The decline in the temperature and that in the frequency of the pulse usually take place in 4 to 6 hours, and these diminutions are never delayed more than half a day. According to this author too, the chill is independent of the fluid injected; it has occurred after the use of carbolic acid, corrosive sublimate, thymol chloral. A chill has followed a prophylactic injection.

Therefore the hypothesis asserted by Sylvestre, that the chill is caused by uterine contractions, excited by the injection, determining the entrance of septic products in the uterine blood and lymph-vesseis into the general circulation, is scarcely tenable in view of the fact last stated.

Kaltenbach has briefly referred to this accident, stating that the cause is not at all clear, but suggests, in addition to entrance of septic stuff into the blood vessels, the possible entrance of some of the injected fluid, and also the destruction of blood corpuscles. He further states that usually the chill has no unfavorable significance.

Can we prevent the chill? It has been suggested that the reservoir of the fluid irrigating the uterus should be held only a few inches higher than the patient's hips. It is hardly necessary to insist upon the importance of having a free exit for the fluid from the uterus. I have generally employed the catheter of Bozeman as modified by Fritsch; but there are several other instruments equally good, some of them possibly better, and among these may be mentioned that of Doléris, which I have occasionally employed.

There is possibly a special lesson to be learned from the chills in this case. It will be remembered that one of these occurred, though no injection immediately preceded it; it followed a profuse perspiration caused by the application of guiacol. May not all of these chills stand for a particular type of constitution? Are they not the expression of some peculiarity of organization, an intrinsic susceptibility to the action of certain agents or influences? We may call them then, for a want of a better name, nervous chills, and make them, including the elevation of temperature, as has previously been suggested, analogous to similar phenomena occasionally occurring after the use of the catheter or sound. But it is doubtful whether any explanation will prove entirely satisfactory.

Relation of Bacteria to Colds.

A Prof. Schenck, according to the London *Globe*, has recently discovered that what is commonly called a cold is due to bacteria. His theory is that when a person enters a cold room, the bacteria flock to his warm body, and find entrance through the open pores of the skin. We are surprised to find a paragraph going the round of the medical journals, calling attention to this remarkable discovery. The idea that bacteria are possessed of volitionary power and capable of pouncing down upon the body like a flock of vultures to seek out the so-called pores of the skin like weasels, is too monstrous for credence by any one who has the slightest knowledge of medicine.—*Modern Medican.*

EXOPHTHALMIC GOITER.*

W. W. HILL, M. D., Weston, O.

This is a disease of unknown origin, and is characterized by exophthalmos, enlargement of the thyroid gland and functional disturbance of the vascular system.

The etiology is known to you, and I will simply say that it is rare in men. It usually occurs between the age of twenty and thirty, although it is sometimes seen in young girls about puberty. It is sometimes seen in several members of the same family. I will also note a few of the causes of the disease, such as worry, fright and depressing emotions, precede the development of the disease in a number of cases.

In the morbid anatomy no constant changes have been found in exophthalmic goiter. Special attention has been paid to the condition of the sympathetic system, as the rapid action of the heart and dilatation of the vessels have been attributed to paralysis of the sympathetic fibers, particularly the vaso-dilators. This view has found many supporters, but neither in the ganglia nor in the nerves are there any changes which can be regarded as constant and peculiar. On the other hand, many features of the disease are explicable on the ground that it is an affection of the medulla oblongata. Dr. Hale reports a case dying of an acute intercurrent disease, in which there was hemorrhage in the floor of the fourth ventricle. I think the vascular and nervous features must be due to a lesion of this kind, but it is difficult on any theory to explain all the symptoms of the disease and to bring into line the mental and vascular phenomena, the exophthalmos and the goiter.

The symptoms vary in different individuals. The acute and chronic forms may be recognized. In the acute form the disease may develop very rapidly; when the patient is suddenly seized, we sometimes have intense vomiting and occasionally diarrhoea, always rapid action of the heart and throbbing of the arteries. In most all cases we have prominence of the eyes, the thyroid gland enlarged and usually soft.

The characteristic symptoms vary a good deal in their onset. The cardiac and vascular symptoms are usually first to develop, and the patient complains of palpitation and shortness of breath, and on examination we find the pulse increased in force, the carotids throb. In long standing cases the heart may be hypertrophied and the sounds very intense. Exophthalmos usually follows the vascular disturbance. It is readily recognized by the protrusion of the eyeballs and, partly from the fact that the lids do not cover the sclerotics, the protrusion may become very great and the eye protrude from the socket, or it may be barely perceptible. The enlargement of the thyroid usually developes with the exophthalmos. It may be general or only in one lobe, and is rarely as large as an ordinary goiter. Tumor is present in some cases, involving the hands mostly.

The prognosis is unfavorable, or my cases were as I have only been called to treat two and they both died. Before I say anything about the treatment I will give you the conditions I found in a girl fourteen years and seven months old.

On December 20th, 1893, Miss A. V. T., was brought to my office. She complained of pain in her head; she was anæmic and nervous. Temperature normal; pulse beat 100, and there was a throbbing of all the arteries. At this time there was no perceptible enlargement of the thyroid gland. Family history was good so far as I could learn. No hereditary disease on either side of the family. At this interview I learned the girl had menstruated at the age of 13 years, and had always been regular until December 1st, 1893, when she had taken cold by getting her feet wet while at school and did not menstruate. At this time I prescribed tincture of strophanthus to lower the pulse rate. I also gave her iron and quinine to build up the constitution. I directed her to report in ten days, but I did not see her again until January 15th, 1894, when I found the temperature normal and the pulse 96, and she was very nervous. I again prescribed quinine and iron, also tincture of strophanthus, and asked to see her within

*Read before the Northwestern Ohio Medical Association, June, 1894.

the next ten days. I did not see her again until March 22nd, 1894, when I was summoned to her bedside and found her in convulsions, pulse rate 160, and all the arteries throbbing, eye balls protruding so that the lids did not cover the sclerotics. This was the first time that I noticed any enlargement of the thyroid gland; this was a little more marked on the right side. I learned at this time that she had been better and had attended school about a month, that on the 20th of March she had been very badly frightened, and that she ran home a distance of about forty rods and fell onto the floor on opening the door and began to complain right away. I at once told the parents that she could not recover, and that if they wanted counsel to send at once. This was about four o'clock A. M., and at 8 o'clock A. M. Drs. Schooly and Cook arrived. We gave bromide, chloral, chloroform and morphia, but nothing would relieve the spasms, and she died March 22nd, 1894, at 8.30 P. M.

We were not permitted to hold an autopsy and cannot give the condition of the brain, cord and internal organs.

COMMUNICATIONS.

CHRISTIAN SCIENCE AND ITS RELATION TO THE MEDICAL PROFESSION.*

HILDEGARDE H. LONGSDORF, A.M., M.D., CARLISLE, PA.

In appearing before you on this occasion I feel it due myself, as well as this learned assembly, to offer a partial explanation of my purpose, in so doing. For otherwise it would certainly savor on my part of the arrogance of conceit, or an unwarrantable assumption of privilege, to attempt to address on a medical subject, such an august company of veterans and superiors in an art where at most I can only be a tyro.

The papers read here are presupposed to come from those whose skill and knowledge have brought honor and repute to their names and value to their slightest utterance on such topics as habitually arise on occasions like this. Far be it from me to invade such a field, only to illustrate by my temerity the time-worn maxim that "fools rush in where angels fear to tread."

But while the primary object of our meeting is mutual discussion of the more immediately important medical subjects, and instruction from those who are so well able to give it, there are also closely allied and leading up to these, many subjects in the line of suggestion and inquiry which may pardonably be taken by the less gifted.

The subject therefore, which I shall briefly consider here is one of these, not a purely medical subject from this standpoint, but rather one of those related subjects. which, though at first glance insignificant and even contemptible, yet from the proneness of the uninformed to exaggerate and mystify diseases and all remedial agencies—carry with them an overpowering influence, and to the younger practitioner especially, are baffling and vexatious.

Such is Christian Science, probably the most pretentious and certainly the most successful of the out-growths of our modern high pressure civilization; which not content with its acknowledged empire over material nature, and subsidizing the results of scientific investigation, must needs enter the realm of psychological phenomena, and skilfully weaving therefrom a tissue of fact and fancy, spread it before the gaze of a too credulous public, call upon it to believe what it cannot explain, and revere what it cannot comprehend.

There have been many such mock systems in former, as in later years, most of them having for a basis the "divine art of healing," along with other pretentions to a spiritual or philosophical status, all wearing a more or less familiar guise to the reader of history. Christian Science, however, goes a step beyond any of its forerunners, is one shade finer, and more plausible in its theory, and more conspicu-

*Read before the Medical Society of the State of Pennsylvania, 1894.

ously successful than any similar intellectual epidemic the world has ever witnessed. It seems to unite and intensify into some semblence of symmetry, something of the astrology and prophetic hallucination of the ancients; something of the religious ecstacy and mysticism of the middle ages; something of the progressive thought of the later school of the English scientists, and welding them together by the despotic power of that prescient imagination which overleaping the bounds of demonstrable truth, presents the result to the conservative thinker of to-day, as a reasonable doctrine, no less a universal panacea for "all the ills that flesh is heir to." These fatuous misbeliefs are the intellectual scandal of our age, and while we must desire to apply some corrective influence, it becomes a puzzling question how to regard those who honestly believe in them and what should be the attitude of the physician toward such as aspire, under its provisions to the office of "healers."

In more accurately defining christian science, I would observe, that it must not be confounded with hypnotism, animal magnetism, faith or mind cure, spiritualism, clairvoyant or other trance, or the old-time powwowing processes which the practitioner in country districts still frequently encounters. All of these it somewhat resembles, having apparently some family features of all, yet differing in essential particulars. Christian science pure and proper, disclaims or ignores these agencies and claims a Heaven-derived power of its own; and in this probably lies its greatest influence—for in all times a "divine right" stoutly asserted and skilfully maintained, has held its own against reason, logic and the evidence of the unprejudiced senses. There is no instinct so universal as that which responds to the intimations of the supernatural, and the most realistic among us must acknowledge this influence as a factor in certain diseases. We see it exemplified in the history of the earliest nations, and there we attribute to ignorance, but the candid student must admit that the advanced intelligence of the later periods has changed the form, but not eradicated the inherent tendency.

To the primitive man death and disease appeared the immediate act of some invisible, but all-powerful being, who from malice or rage or other human passion, dealt out dire punishment upon mortals. Hence his favor was sought and propitiatory rites and ceremonies were observed to avert disaster and suffering. But this is not to be wondered at. The ignorance of the ancients as to the true character and real origin of disease appropriately correspond with their ignorance of the constancy of the phenomena of the external world. Subsequently, while the more cultivated and advanced nations were passing through the throes of a mighty religious revolution and the dismemberment of social structures was everywhere imminent, a further development of this natural attitude of man toward a Creator and the universe took place, and a thousand abnormal manifestations of mind over matter were attested, until a mystical system —partly real and partly fanciful was evovled. Under this system many delusions were experienced, by such as might be called honest believers, while jugglers and magicians in all fields, but especially so in those allied to the curing of disease, were rife.

Following the renaissance of art and literature, knowledge grew, and it may be that with a more general diffusion of the underlying principles of medical science, such as the uneducated mind can grasp, and a clearer apprehension of the import of recent discoveries in bacteriology and similar fields of investigation, the demonstrations which are now so constantly made to lead the masses back to the twilight ages, in this respect, will cease. But until this more general intelligence shall come to pass, we will doubtless continue to witness the phenomena of the blind gaining instant sight, the lame being made to walk, and the suppurating sore healed by a word; such alleged cures being regular occurrences in the vicinity of a properly qualified christian scientist. From these centers of abnormal experiences, ever widening influences diverge, and we shortly see vast numbers of enlightened and cultivated persons of both sexes and of every shade of religious belief, accepting and propagating the ideas that form the basis of the popular manifestation.

Christian science shrewdly appreciates the value of this prevailing tendency of human nature, and therefore, as its name imports, it is found to be a compound of

theology and *the art of healing*—in these two sides expressing the strongest wants of mankind. Otherwise it calls itself the "Science of Health," and an elaborate treatise has been given to the public for the purpose of explaining its peculiar doctrines or principles, and setting forth the benefits which must accrue from its universal acceptance.

It was *discovered*, as its adherents put it, in the year 1866 by Rev. Mary Baker G. Eddy, of Lynn, Mass. In giving an account of her discovery and preliminary experience, Mrs. Eddy says that she was impelled from childhood "to seek diligently after God as the one great ever present remedy for all human woe." She states that the physical side of this research was aided by hints from homeopathy, to the conclusion that *mortal belief*, instead of the drug, governs the action of material medicine. She found in the remedies enumerated by Jahr that the prevading secret was that "the *less* material medicine we have the better the work is done," and she proceeds to prove that this is so by an illustration from this school of practice. "One drop of the thirtieth attenuation of Natrum muriaticum in a tumblerfull of water and one teaspoonful of water mixed with the faith of ages would cure patients not affected by a larger dose." The drug disappears in the higher attenuations of homeopathy, and *matter* is thereby reduced to the proportion of mortal mind, but the curative principle remains and is found to be even *more* active.

She also relates her own experience, while in failing health, with a distinguished mesmerist. His method of treating her was by *manipulation* and water, and although she acknowledges that he had advanced views along his own line of research, she pronounced "mind cure on a mental basis" a kingdom divided against itself.

In a similar manner she argues against the efficacy of animal magnetism. It is interesting to note the elimination of her own peculiar idea from the prevailing influences of the times and her final success in reaching a standpoint *differing* from all her predecessors and thus gaining *originality* and *potency* for her cause. It must be confessed that there is something beautiful and attractive in the ideas thus expressed, and the most fastidious among us could take no exception (on the ground of ethical mortality) to the tenor of her sentiments.

In her conclusions the odium of hypnotic experimentation is eschewed; the ridicule attaching to clairvoyant and other mediumistic practices is avoided. She demonstrates in fact, the spiritual attenuation of a noble idea, more subtle and dilute than any homeopathy ever propounded; a methaphysical abstraction more elusive and begiling than any hypothetical figment portrayed in the pages of German philosophies; while there lingers about her doctrine a classic flavor not unworthy the noble parentage of Plato, who first taught the theory of Ideas or Essential Forms.

Each one of these was at once the prototype and the cause of a number of transitory existences in the sphere of the sensible. To these ideas, as to higher realities, phenomena were referred, and their explanation found in them by Platonism. Following along this line of suggestion, which every classic student has conned, we perceive that modern christian science is a restatement of an ancient principle, which has lived in and influenced metaphysical speculation in all ages.

Mrs. Eddy tabulates her theory on the understood dominance of supernatural *dread* or *fear* in most people, and at the same time skilfully evades direct issue with superstitious antagonisms, by calling *fear* another name for disease. She declares that "war is waged between the evidences of spirit and the evidences of the five physical senses." "Divine science was against *sin*, *sickness* and *death*." And again, "All sensation is *mind* and mind is *God*," and further "The notion of more than *one* mind is unsatisfying and unscientific." Her deduction, therefore, is that *mind* is synonymous with *Good* or *God* and per consequence. All else is *material* and not to be considered.

Thus she directs the following formula. "Science saith, to all manner of disease, know that God is all-powerful and ever-present, and the sick are healed." Other statements embodying this *science*, so-called, are made in the extraordinary book called "Science and Health," which is in a sense the Pharmacopeia of the new school, but it is on the basis of the foregoing that their practice is built up.

The patient is taught that sickness is a

belief, a *latent fear* made manifest on the body in different forms of disease. "This *fear* is formed *unconsciously* in the silent thought, as when you waken from sleep and feel ill, experiencing the *effect* of a fear, whose existence you do not realize." But if you "fall asleep conscious of the Truth of Science, viz., that man's *harmony* is no more to be invaded than the rythm of the Universe, you cannot awake in fear or suffering of any sort." Thus christian science aims at the highest medical ideal, the prevention, as well as the cure of disease. That *matter* cannot suffer was illustrated in a very simple manner by a very intelligent lady, a friend of mine, who while on a visit to the West, was lead to investigate, and finally become a convert to christian science. She said with much apparent conviction, "why if you would cut off your hand and throw it on the floor, it couldn't feel." "It is only your mind which is *spirit* that feels and *spirit* which is *God* cannot be diseased or suffer." So the whole belief in disease is *unreal*, a fantasy, the result of erroneous teaching, or latent fear, or sin.

This, then, is the whole doctrine. Comprised in these somewhat enigmatical and contradictory statements, is the motive power of a system which has more strength than most of us would be willing to believe. If it were not for this fact, that it is rapidly spreading, gaining friends and influence among the most intelligent classes, we might well dismiss the subject with a smile; as one more of the numerous phases in which the ever-restless mind, ever recurring to the unknown, ever tracing its circling course upon itself, seeking to find the cause from the phenomenon, has manifested itself.

But it has a vast and increasing power and not only among the uneducated. It has its representative literary journals, a system of propogating its tenets by phamphlets and tracts and books. It has an array of special agents or missionaries, a respectable showing of institutions or metaphysical colleges, extending over many of the different States, and a vast number of private establishments for the cure of every disease under the sun. Preaching and teaching come into the plan and to a thoughtful observer it seems as if the dark ages, when demonology and magic ruled the court, the camp and academic grove, were about to return.

It is, as we have seen, an old acquaintance with a new face, and its extraordinary progress has doubtless been due to the reactionary tendancy of the times among a large class of orthodox people, from the scientific materialism, naturally growing out of the demonstrations going on here and abroad, as to the cause and prevention of disease.

The question arises how we are to regard it and how we are to be armed against its inroads. If mental force has a therapeutic value, if the mind can control not only the kingdom which of right belongs to it, but also the laws of matter and of physical sense, then it seems as if our resources were inadequate, and some form of definite action should be taken whereby we could cope successfully and with dignity, with what must otherwise be a dangerous foe.

It would be out of place to argue against the possibility of mental cures. Thousands of such instances are upon authentic record and it would be idle to deny the power of the mind over the body. There is no question that certain diseases have been cured by believers in faith cure, in prayer cure, in every phrase of this theory that can be imagined. There is such a healer near my home, who has hundreds of patients, from near and from far they come, and I do not doubt that some are cured, and to a rational thinker there is no mystery about the process, but the fact remains that the process cannot be rationally explained, so that the subjects of it can clearly understand it. Consequently in endeavoring to maintain our professional self-respect, we are in danger of actually becoming illiberal, narrow-minded and dogmatic.

The importance of some definite restraining force for these abuses can scarcely be overestimated, and if public opinion and the advanced philosophical science of our era have been powerless to effect this, it would seem to come into the province of legislative enactment.

Excoriations in Children.

Dr. Crondall (*Revista de Ciencias Medicas de Barcelona*, No. 7, 1894) advises the following powder:

Salicylic acid	(grs. viij)	0.5
Subnitrate bismuth	(3ij)	8.0
Starch	(3iss)	6.0
Ointment roses	(3j)	30.0

—*Pritchard.*

CONTRIBUTION TO THE SURGERY OF THE GALL-BLADDER, WITH REPORT OF THREE CASES OF CHOLECYSTOTOMY AND ONE CASE OF CHOLECYSTENTEROSTOMY.*

X. O. WERDER, M. D., PITTSBURG, PA.

There are practically only two operations to be considered for the relief of cholelithiasis, the most common affection of the gall-bladder requiring surgical interference, namely, cholecystotomy with suture of the edges of the gall-bladder to the abdominal wound and cholecystenterostomy. Cholecystectomy, on account of the greater mortality attending it as compared with these two other operations, is, in my opinion, only applicable in malignant disease of the gall-bladder, or when this viscus has become so contracted as to make either of the two operations technically difficult or impossible. Cholecystotomy, with complete closure of the incision and return of the gall-bladder into the peritoneal cavity, still advocated by some operators, and called "ideal cholecystotomy" is equally objectionable for the same reason of greater mortality.

Generally speaking, the technique of both operations, cholecystotomy and cholecystenterostomy has been so much improved and the results of either proven so satisfactory, that a kind of rivalry has arisen between them; and since the introduction of the "Murphy Button" it almost seems as if the latter was destined to supersede the former. The principal reason of this is the fact that cholecystotomy is not infrequently followed by a permanent, or at least, a long persisting fistulous opening between the gall-bladder and abdominal wound, accompanied by a more or less constant stream of bile pouring over the abdomen, which is not only a source of annoyance to the patient on account of the inevitable soiling of the clothing and by giving rise to eczematous eruptions and dermatitis, but it may, when the greater portion of the bile is turned out of the system through this external sinus, become a serious menace to health and the life of the patient, because a certain quantity of bile, as we know, is necessary to carry on the digestive functions properly.

By means of the "Murphy Button," cholecystenterostomy has not only become a remarkably simple and easy operation, but judging from the uniformly successful results published within the last few months, it appears to be one of the safest operations in abdominal surgery. It is, therefore, not at all surprising that Murphy, the ingenious inventor of the anastomosis button, and his followers have been decidedly partial to cholecystenterostomy in all cases in which operation is indicated, when we consider that both operations are about equally safe, and that the latter has the advantage that it does away with the not uncommon sequela of a biliary fistula and establishes at once a new channel from the gall-bladder into the intestinal canal, through which even the largest calculi find a ready passage into the bowel, and that it obviates the necessity of scrupulously searching the common duct for any obstruction for the purpose of removing it. I am not aware of any unpleasant after-effects in the cases operated on, up to the present, but the operation is a new one, and the patients have scarcely been under observation a sufficient length of time to allow of any definite conclusions. It seems a matter of considerable importance to me, to make the anastomosis as closely to the normal communication, by means of the common bile duct, as possible. For this reason the duodenum, or, at least, the upper portion of the jejunum, should be selected. If, for some reason, this part of the intestine cannot be brought into view, as happened to me in case No. III, cholecystotomy, at least in uncomplicated cases, seems preferable.

The cases reported in this paper are three cases of cholecystotomy and one case of cholecystenterostomy, all followed by recovery. The operation of cholecystotomy was performed in two cases for cholelithiasis, the number of calculi removed being in one case twelve, in the other sixty-eight, varying in size from a pea to a hickory nut; in the other for

* Read before the Medical Society of the State of Pennsylvania, 1894.

empyema of the gall-bladder. Cholecystenterostomy was done for a permanent biliary fistula with, at least, a partial obstruction of the common bile duct, probably due to a stenosis and adhesions. In two cases (No. I and II) the gall-bladder was completely surrounded by omentum and intestines, so that it became necessary to free some of these adhesions from the anterior surface of the gall-bladder before it could be incised. In both of these cases the walls of the gall-bladder were very much thickened, in one (No 1) not less than three-quarters of an inch, and strong suspicions of malignancy were entertained at the time of the operation, but the patient, now over a year since her operation, is in perfect health.

CASE I.—Mrs. R. W., æt. thirty-nine years; seven children, youngest one year. During her last pregnancy had two, three or more paroxysms of pain in right hypochondriac and epigastric region. After her confinement October 15, had no attacks until the beginning of April, 1892, when they returned at intervals of from four to six weeks, and during the three or four months preceding the operation, these paroxysms came on every week, sometimes even two or three times a week, keeping her confined to bed half of her time. I saw her for the first time six or seven weeks before her operation, when she was suffering from an attack of local peritonit is, compelling her to remain in bed about two weeks with elevation of temperature to 101, vomiting, tympanitis and icterus. Over the region of the gall-bladder a mass could be mapped out exceedingly tender, about three inches long and one and a half wide.

Operation March 22, 1893, at Mercy Hospital. Vertical incision three inches long over seat of tumor; this was found completely covered with omental and intestinal adhesions, which had to be separated in front of the gall bladder before it could be incised. Walls of gall-bladder about three-quarters of an inch thick, exceedingly friable, so that sutures would scarcely hold, suggesting malignancy; they were sutured to abdominal incision. Ducts were found unobstructed. Sixty-eight calculi of various sizes were removed. Rubber drainage introduced and gall-bladder washed out. Fistulous opening closed on tenth day, and patient has remained in perfect health ever since.

CASE II.—Mrs. Agnes K., referred by Dr. J. C. Hierholzer, æt. fifty-three, was suffering for seventeen or eighteen years from burning and tearing pains in the hepatic region, with vomiting at intervals of various duration and treated by different physicians for pleurisy, bilious attacks, neuralgia, etc. Present illness began in March, 1893, with severe pains of paroxysmal character, irregular elevations of temperature, dry tongue, constipation, very severe headache and no jaundice. Marked tenderness over region of gall-bladder, which was distinctly enlarged, reaching about four inches below border of ribs, Operation July 3, 1893, at Mercy Hospital. Usual incision exposed gall-bladder surrounded by omental and intestinal adhesions; these were broken up over anterior surface to make room for incision. Walls of the gall-bladder very much thickened; sutured to abdominal wound; gall-bladder contained several ounces of mucus and pus, but very little bile and no calculi. Rubber drainage tube inserted and gall-bladder washed out daily. Discharged from the hospital completely relieved, but with biliary fistula which closed completely three or four months after operation. at present she is in perfect health; she has a small hernial protrusion at site of operation. This case is interesting on account of the history of biliary colic extending over seventeen or eighteen years, with attacks of local peritonitis and a beginning empyema of the gall-bladder without a trace of any calculi.

CASE III.—Mrs. D., æt. twenty-nine; for over a year had paroxysms of intense pain in epigastrium and right hypochondrium, lasting from a few minutes to several hours, accompanied by vomiting. During the last few months these have returned at shorter intervals, sometimes daily, scarcely less than two or three attacks a week, so that her general health began to fail. Occasionally her conjunctiva was slightly icteric, but there was never any distinct jaundice. The region of the gall-bladder was examined repeatedly, but while always tender to the touch, it was never found enlarged. Repeated examinations of stools proved negative. Her condition became so miserable that we at last decided to explore the gall-bladder. Operation was performed January 28, of this year, at the Mercy Hospital. Gall-

bladder not enlarged and free from adhesions, considerably distended with almost clear fluid. Ducts were free. Wound in gall-bladder attached to abdominal wound and twelve large, hard gall-stones, without any facets, but with rather sharp points, removed. Left hospital February 24, still discharging bile. Discharge gradually lessened, biliary fistula closing up completely for a few days at a time, then opening again, but is now completely healed. She has gained flesh since the operation and is in good health, but is troubled with flatulency, giving her some pain in the epigastrium, which is, however, immediately relieved after a free eructation of gas.

Case IV.—Miss Bella F., æt at twenty-five, admitted to the Mercy Hospital, April 3, 1893; service of Dr. C. O. Goulding, with the diagnosis of typhoid fever. As typhoid fever, the case was of more than ordinary severity, the temperature reaching 103 and higher for eleven days. April 16, patient was seized with severe pain in epigastrium, followed by vomiting for twenty-four hours. A tumor was noticed two days later in the hypochondriac region, somewhat the contour and about the size of a kidney, not very tender on pressure. During the next few days, tenderness over tumor increased and pains of a lancinating character were complained of. Temperature and pulse still increased.

April 26, under ether narcosis, Dr. C. O. Goulding made an incision over the region of the tumor, which, when exposed, was of a livid color, deeply congested, of oblong shape and fluctuating, extending down nearly to illiac fossa. Not adherent at point of incision, but slightly adherent to abdominal wall over limited area below. Tumor was not incised, but wound was packed with iodoform gauze.

April 28, two days later, during which time patient's condition had somewhat improved, the tumor was opened and about half a pint of viscid, semi-transparent fluid containing pus was removed.

May 1, great amount of biliary fluid discharged since; removed several fragments of gall-stones. Several other stones were removed at varying intervals, the fistulous tract gradually growing smaller in the meantime.

June 5, sinus dilated with laminaria tent and several stones removed; some days later a stone was found occluding cystic duct as shown by a continuous discharge of considerable mucous, but no bile; stone was located three and a half inches from external opening, but all efforts to remove it by forceps or irrigation proved useless.

July 12, she was again anesthetized, fistulous opening enlarged in line of old cicatrix one and a quarter inches. Efforts at extraction failing, the stone was crushed and fragments removed. It was not faceted, almost round, diameter about three-quarters of an inch. Wound was packed with gauze and allowed to heal by granulation. Bile discharged freely after operation. Patient's condition much improved and gained in weight. Fistula was almost closed and patient allowed to go out of the hospital August 24, continuing under observation. For above notes, I am indebted to Dr. C. O. Goulding, her attending physician.

Cholecystenterostomy: Above patient was readmitted to Mercy Hospital, September 8, and through the kindness of my friend and colleague, Dr. Goulding, transferred to my department. Biliary fistula has been discharging a great deal of bile since leaving the hospital, and she is complaining of considerable pain and tenderness over region of liver and gall-bladder and is constipated. She is very anxious to be relieved, not only of her biliary fistula, but of her pain which is more or less constant, and keeps her awake at night. For this reason, after the usual preparations, an exploratory incision was made on September 15, 1893, about four inches in length between the old cicatrix and the median line. The adhesions posterior to the liver were so firm, that the intention of examining the common duct and removing any obstruction that might be located there, had to be abandoned and cholecystenterostomy was performed in the hope that a new free channel between the gall-bladder and the intestine would not only cure the biliary fistula, but relieve her of her pains. The duodenum was so firmly bound down by adhesions, that it could not be brought up; a loop of the jejunum was therefore picked up, the gall-bladder opened near its abdominal attachment, and attached to the jejunum by means of the "Murphy Button" in the usual way. The abdominal wound was closed by silk-worm-gut sutures, and a piece of iodoform gauze

was packed into the old biliary fistula. The patient rallied well from the operation; two hours afterward her pulse was 76 and temperature 100⅘°.

The first two days after operation, a large quantity of bile was discharged through the fistulous opening, and on the third day she showed some signs of jaundice.

September 23, there was some blood mingled with the bile discharged; the skin surrounding the fistula had become slightly eczematous. In the evening of the same day, when the dressing was changed, there was only a very little blood contained in the bile discharged, but it had a distinctly fecal odor.

September 26. The discharge does not contain so much bile as formerly, but seems to consist of mucous and fecal matter tinged yellow by bile. Eczema of skin still very annoying. For fully a week there was quite a copious discharge of mucous and fecal matter, so that the dressings required changing three or four times a day. No rise of temperature since September 23.

October 11. Patient sat up nearly the whole afternoon; during this time the button was passed by the bowels, just twenty-seven days after operation.

October 20. Dressing showed no evidence of discharge for two days; eczema all disappeared; laparotomy wound completely healed; patient is able to be up all day and feels quite well.

Since her discharge from the hospital she has been able to return to her work as a servant girl, and has been in very good health until about three or four weeks ago she feel down a flight of stairs, alighting on her right side over the old cicatrices, which gave rise to considerable pain over the region of the gall-bladder.

In a similar case of biliary fistula, it would be preferable to separate the adhesions between the gall-bladder and the abdominal wall, and place the male portion of the Murphy Button into this old fistulous opening, and unite that with the intestine. This has the advantage that no new opening is required in the gall-bladder, and that the fistulous tract in the skin can be closed at once, doing away with all biliary and fecal discharges with which the convalescence of this case was complicated. The fact that the gall-bladder remains attached to the abdominal wall after anastomosis is made, interferes with its contraction and favors the continuance of the fistula.

Ultimate Prognosis of Neglected Adenoid Hypertrophy.

Dr. D. Bryson Delavan (*Medical Record*) says:

The question is asked, does adenoid hypertrophy, if left to itself, disappear, leaving the vault in a normal healthy condition? Generally speaking, it does not, but remains under some pathological state, which may continue throughout the life of the patient.

The enlargement may not subside, and a degree of hypertrophy sufficient to cause serious injury and annoyance may continue to exist for may years.

The so-called "Thornwald's disease" appears to be nothing more than neglected adenoid hypertrophy.

Disappearance of the hypertrophy may be attended with an atrophic condition of the vault of the pharynx, the result of which is a pathological state detrimental to the patient and difficult to cure.

The above conditions may influence not only the locality in which they arise, but may have far-reaching and disastrous effect upon other organs. The ultimate prognosis as to the local condition, therefore, in cases of neglected adenoid hypertrophy, is unfavorable.

Infantile Pneumonia.

Most authorities agree that the pneumonia most frequently met with in young children and babies is the catarrhal variety, and the areas involved in this process necessary to make the baby a very sick one, are often so small that diagnosis by physical examination of the chest is sometimes very hard to make. It is in this case, however, that the pecularity of the cough gives us valuable aid in coming to a conclusion as to the presence of pneumonia. Where the baby gives one or several short coughs, followed immediately by a suppressed cry, with an expression of pain on the face, it is very suggestive, and if this sign is accompanied by dyspnœa, in which the nasal alæ play more or less violently and the temperature is elevated, we will rarely go astray in making a diagnosis of catarrhal pneumonia, irrespective of physical signs.—*Ex.*

MUSCULAR ASTHENOPIA AND ITS TREATMENT BY GRADUATED TENOTOMY.*

CHAS. HERMON THOMAS, M. D., PHILADELPHIA.

During the past decade a great advance has taken place in our knowledge of the anomalies of the ocular muscles. Until well within that time, the standard text-books on ophthalmology, so far as I am aware, recognized the so-called insufficiency of the internal recti only, as the cause of muscular asthenopia; affections of the remaining muscles being treated solely in their relations to diplopia and strabismus. It is now almost universally conceded that the opposing and vertical muscles are subject to like defects, with corresponding symptoms of equal or even greater importance. Recent editions of systematic treatises show that most writers now give to the whole range of muscular anomalies the prominence which their importance demands. Among these may be mentioned the latest edition the work of Noyes, which treats the subject elaborately, and also the works of de Schweinitz and of Norris and Oliver, both of which latter deal with it at considerable length. The increased interest and scope which the subject has acquired has resulted in the very general adoption of a new and systematic nomenclature—that originally proposed by Stevens. This improved terminology is employed by the authorities just named and is also introduced in the recent American editions of the works of Fuchs and Juler. As showing the increased importance accorded to the subject, it is worthy to be mentioned that at the meeting of the Pan-American Medical Congress, held in Washington within the past year, one day out of four was allotted by the Ophthalmic Section to the discussion of disorders of the ocular muscles.

The form of asthenopia under consideration results from disturbance in the normal use of the eyes as a pair—in effect acting as one single and not two separate organs—œil cyclopienne. The uncontrollable impulse to secure binocular vision, throws upon the extrinsic muscles of the eye a constant and delicate service during the continuous effort to maintain accurate adjustment in the fixation of objects viewed. Interference with the movements of the eyes by disturbance of the normal relations of their muscular components, calls for an excessive expenditure of nervo-muscular energy, to secure compensation and maintain the eyes in the proper position to secure single binocular vision. Exophoria—divergence defect—may demand the utmost exercise of the power of convergence, constantly applied; esophoria—convergence defect—on the contrary, that of an excess of abduction, involving the development of an unusual and abnormal innervation and muscular action. Such efforts may prove exhausting and are frequently the cause of disturbances which manifest themselves in a series of symptoms more or less marked and important.

The symptoms most frequently observed are, a sense of fatigue in the eyes, more or less constant and usually aggravated by definite use; objects viewed become indistinct and sometimes double, with occasional transient strabismus; headache; photophobia; dizziness; great discomfort while looking at moving objects, and when the patient is himself in rapid motion, as in looking out of a moving railway train; pain in using the eyes for definite fixation, which pain is frequently referred not to the eyes alone, but to the frontal, temporal or occipital regions, rarely to the vertex. Indeed, a large proportion of cases of headache, whatever the special variety, are symptomatic of eye-strain due to ocular defects and, many of them, to disturbances of the ocular muscles. Headache may supervene at once upon use of the eyes or it may be delayed.

The following conditions, alone or variously combined, are frequently present:—pain in the back; drowsiness in some, insomnia in others; a variety of reflex neuroses; mild blepherospasm, involving a few fibres only of the orbicularis; twitching of the eye-lids; palpitation of the heart; night terrors; nauses; indigestion; constipation and a host of other symptoms.

These symptoms and such as these, however, it will be seen, are often associated

* Read before the Medical Society of the State of Pennsylvania.

with accommodative asthenopia as well; excepting only the trasient diplopia or strabismus mentioned, and which is of infrequent occurrence.

On the whole, it may be said that the subjective symptoms of asthenopia as elicited in the consulting room, show almost no distinctive characteristics pointing to their especial origin, whether refractive or muscular; the same headaches and the same sense of eye-strain are complained of under both conditions. The test which has been given as differentiating the two disorders, namely, the use of one eye, the other being excluded from the act of vision for a time by covering it, has, in my experience, usually proven inefficacious.

Practically then, though the subjective symptoms alone are often inadequate to show the existence of muscular defect, objective investigation usually yields definite and uniform results, often indeed showing an exactness scarcely inferior to those obtainable in refractive determinations. Sometimes, but very rarely, the conditions found are inconstant or even erratic, and then great care is required in the estimation of their value.

As regards objective tests, the so-called cover test is the most readily applicable and is deserving of much confidence; it should not be omitted in any case. The diplopia tests such as vertical prisms, Maddox rod, etc., and the determination of abduction, adduction and sursumduction are indispensable in reaching a reliable conclusion.

It should be a fixed rule of practice to eliminate first the refractive and accommodative elements in any case under examination, by the proper glasses, leaving the muscular conditions to be dealt with at the last. Under these circumstances, it will be found occasionally, though not as frequently as could be wished, that the muscular anomalies vanish after correction of errors of refraction and accommodation; the final test as to which of these may be the active disturbing agent in any particular case, must frequently be the therapeutic test.

The following cases selected from my case books are presented as illustrative of the clinical history, treatment and its results in patients, the subjects of disorders of the ocular muscles:—

I.—T. H. L., mechanical engineer, aged 42, referred to me by Dr. W. H. H. Githens, June, 1891. Wearing high hyperopic correction combined with prism before each eye, 4 degrees, base in. Divergent squint, right eye deviating, except when attention is fixed. Diplopia except on great and tiresome effort, notwithstanding the prisms worm; much headache, confined mostly to the region of the brow. Reading and other definite and constant use of the eyes always at the expense of fatigue, which is only partially relieved by covering one eye; a page of ordinary size often overlaps one-half. Is particularly disturbed by sounds which are slight and not ordinarily noticed. Has multiple false images, monocular. Exophoria 14°. Operation, right exturnus, complete section, immediate result, Orthophoria. Two weeks later, Exophoria 8°, operation, complete, retrenched with suture, result, Orthophoria. One month later, Exophoria of 3°, reasserted. Exophoria in accommodation 20°.

Expresses much satisfaction in the comfort derived from the operation. Has no tendency to diplopia for distant, but somewhat for near vision. Has a new sense of solidity in objects reviewed; is conscious of definite binocular vision. There is also relief of the headache and of the abnormal sensitiveness to sounds. Finds that the use of eyes, as in accurate examinations of instruments and drawings, is now possible where it was not before. The false images, monocular, noted at the first visit, have almost entirely vanished.

Three years later, there is an Exophoria of 2°, Exophoria accommodation 26°, and an Ab. of 4°, and an Add. of 11°. Has passed the intervening time since the operation in occupations involving much use of the eyes, but in entire comfort.

II.—H. R. S., aged 48, master builder. A man of great physical strength and endurance; suffers severe pain localized in the eyes; complains particularly of the right eye feeling as "if it were drawn out by a cork-screw." This is accompanied by general nervousness and irritability with a prickling sensation over the whole body, after reading for a comparatively short time. Eyes feel dry and uncomfortable. All discomforts vanish to a great degree when away on vacation and the eyes are resting, except a severe headache which has been habitual and almost constant for years. Has high hyperopia, R 5, D. L 4, D.

Convergence defect; Es. 5°. Tenotomy right internus, result, Orthophoria. Four months later reported no headache since the operation and that relief occurred within 24 hours. All the symptoms before described have vanished. Patient highly appreciative of the change for the better which has taken place.

III.—H. W. P., retired merchant, aged 64; makes no complaint of pain or sense of strain, but only of some annoyance or inconvenience in the use of his eyes. He has a hyperopia of 1D, which corrected, gives him full vision in both eyes. He is able to fix distant and near objects with both eyes and at no time is there any manifest strabismus. He has a habit of opening and closing his eyes alternately every few seconds, during which act he elevates and corrugates the brow of the open eye excessively. This he does both in reading and in conversation, producing a very grotesque appearance, and, which being much remarked by his friends is, perhaps, the principal reason why he seeks advice.

A muscular test shows a divergence error, exophoria 20°, with a left hyperphoria of 2°. After wearing correcting prisms for a few days, the Ex. increased to 25 degrees and the Hy. vanished. An operation was then performed, a complete section of the right externus, resulting in a reduction of the Ex. to 13 degrees; and two days later a tenotomy was made on the right externus, not entirely complete, leaving an Ex. of 6 degrees. Six months later there remained an Ex. of 5 degrees. The habit of opening and closing his eyes alternately which was plainly an instinctive movement to avoid diplopia, had ceased with the operation and he expressed himself as entirely comfortable. His appearance is greatly improved. The small amount of exophoria remaining I deemed it conservative, under the circumstances, to leave uncorrected.

IV.—R. T. B. referred to me by Dr. Stubbs of Wilmington. Suffers from intense nervousness, extreme insomnia with mental depression, accompanied by suicidal fears. Close application to her work, (that of painting fine decorations on silk) causes distress of a grave character in the forehead near the eyes, sometimes running down the nose and extending to the face. Has had headache only recently. Uncontrollable winking at times, very troublesome, frowns habitually. Eyes not pained by use. Prickling sensation over the whole body, at all times, but mostly at night. Refraction normal, Es. 1°, Hy. 1°. Prescribed vertical prism correcting hyperphoria, which gave immediate relief, frowning ceased. Much irregularity of reaction of vertical and lateral muscles, but Es. of 10° proving very constant tenotomy of right internus was performed. Great improvement and abolition of all symptoms followed immediately. Three months later, orthophoria was established. Insomnia and nervous symptoms entirely abolished. Patient describing her condition said she was now entirely comfortable.

V.—W. J. D., aged 35, bookkeeper, referred to me by Dr. E. J. Nolan. Has high compound hyperopic astigmatism, for which he wears the correcting glasses, but complains of pain around the eyes with dull pains in the occiput. Symptoms aggravated by use of eyes for near work, interfering with regular duties. Has manifest Es. 12°-15°. Ordered prisms aggregating 10°, base out which were worn for a week with comfort. Es. advanced meantime to 22°. Tenotomy, right internus, complete section, result, Es. 4°. A week later 12° was manifested with marked recovery from convergence under cover test. A second operation, left internus, section almost complete; result, orthophoria when his sphero-cylinders are worn, though there is recovery from convergence, Es. 6°, when glasses are removed. Reports entire comfort and ability to use his eyes to an unlimited amount.

Considerable discussion has taken place as to the relative frequency of esophoria and exophoria, and different writers have asserted a marked preponderance on either side. A review of my cases for the last nine years shows that in the operative cases, as between esophoria and exophoria, these are almost exactly equally divided; and while there has been a certain variation on one side or the other from year to year, a close parallelism has been maintained in the main throughout the whole period. This examination also shows, as regards the refraction in both these forms of heterophoria, that hypermetropia predominated. The predominance of hypermetropia was more marked in the cases of esophoria than in those of exophoria, as the following figures show:

In esophoria the relative frequency of H. over M. was in the proportion of 3¾ to 1; in exophoria the relation of H. to M. was as 2½ to 1. Thus, while the most of the cases of heterophoria show hyperopic refraction—as is to be expected considering the greater frequency of this condition over myopia; when the static refraction is viewed in its relation to the accompanying heterophoria, we find that hypermetropia is usually accompanied by esophoria and myopia is most frequently associated with exophoria.

There is still to be found occasionally one who maintains the opinion that a complete tenotomy is required in every case of heterophoria calling for operation, on the assumption that no gain whatever is to be derived from partial severance of the tendon. My experience leads me to a directly opposite conclusion.

In my first paper on this subject, written six years ago*, I stated in effect that the fan-shaped expansions of the tendons of the recti at their insertion in the sclerotic are wider and thinner and their margins more elastic than is generally appreciated; and, that the elasticity of the margins is an influential factor in the production of a relaxation of tension in the tendon, graduated and definite in amount and permanent in character, permitting the effectual cental portions of the tendon to retract and form a new attachment to the globe further back. This I desire at this time especially to reaffirm and to add that graduated tenotomy is practicable and effective, only because of the elasticity of the margins of the tendons. No attempt is here made to distinguish between the tendon and its immediate covering derived from Tenon's capsule; for distinct as they are anatomically, they are one surgically, for the purposes of this operation, at least, and are to be treated as one.

It is true that occasionally a case is found in which no appreciable change in position occurs until complete severance has been accomplished, but such cases are altogether rare and exceptional. In the great majority of cases a gain graduated from 1 degree to 8 degrees may be made without complete severance. In those exceptional cases referred to, the tendon is thick and narrow at its insertion, and the elastic margins are either deficient or absent.

The technique of graduated tenotomy involves considerable difficulty and complication at times, and the performance of the operation is not to be looked upon as in any case a trivial procedure. It is an altogether more delicate and difficult operation than that for strabismus; and not less so indeed than any other operation done upon the eye-ball, not excepting that for cataract; but, when skillfully performed, it may be expected to yield definite and satisfactory results. It cannot be successfully undertaken without special instruments. Those devised by Dr. Stevens leave little to be desired. The ordinary strabismus instruments are altogether unsuitable by reason of their coarseness and clumsiness and should never be employed.

A study of nearly ten years faithfully pursued in all cases of asthenopia coming under my care has led me to the following conclusions:

Muscular asthenopia may present symptoms of all grades of importance, from the slightest to the most serious.

The muscular conditions in every case should, as a matter of routine, be as carefully investigated as are the media, eye-ground, refaction and amplitude of accommodation.

As in refractive, so in muscular asthenopia the gravity of the symptoms bears no constant relation to the amount of the physical defect. It is impossible to predict with any considerable degree of definiteness, the result of correction of either refractive or muscular error. As much and very much the same kind of relief is to be expected from the correction of the muscular anomalies as from the correction of errors of refraction and accommodation, as might be expected from the similarity in the symptoms which these conditions respectively cause.

During the earlier years of my study of these cases, I gave considerable attention to the graver neuroses—especially epilepsy—in connection with muscular anomalies; continuing the observation of a series of epileptic cases throughout a period of about five years. The results obtained in this series were altogether negative, not one recovering. With expectations of

*Graduated Tenotomy in the Treatment of Insufficiencies of the Ocular Muscles by C. H. Thomas, M. D. *Trans. Philadelphia County Medical Society*, March, 1888.

cure of epilepsy greatly abated, I nevertheless consider it proper to remove eye-strain of muscular origin in this affection as I would in any other condition; and for the additional sufficient reason that sound conservatism in the management of epilepsy calls for the removal of all possible sources of peripheral irritation.

TRANSLATIONS.

SALOPHEN AS AN ANTI-RHEUMATIC.*

DRS. B. CIULLINI AND A. VITI.

The following observations were made by the authors at the Clinic of Prof. Raimondi at Siena, and under his supervision. On the ground of these studies they consider Salophen an excellent remedial agent, both in acute and chronic rheumatism, its advantages over salol and salicylate of soda being that it is tasteless, not hygroscopic, and devoid of unfavorable after-effects.

CASE 1. S. M., female, aged 48, married; suffering from chronic articular rheumatism. Complains in the joints, especially of the right side, and also pains in the jaws; right knee slightly enlarged. January 26th, salophen 2.50 Gm., was administered. Slight diaphoresis was produced, but pains continued of the same intensity. No after effects. January 27th, Salophen 2.50 Gm., given, with slight relief of pains. January 28th, same dose; no change. January 29th, same dose; pain and swelling somewhat relieved; administration of remedy continued in same doses until February 4th, but as no improvement was observed, iodide of sodium was substituted which also failed to afford relief.

CASE 2. C. G., male, aged 59, had his first attack of acute articular rheumatism at the age of nine years, but enjoyed good health up to February 7th, 1893. Entered the Clinic February 13th, with tumefaction and pains in all the joints of the lower extremity, especially the tibio-tarsal, and also in the shoulder and elbow joints. On following day Salophen 3.0 Gm., divided in six doses, at intervals of two hours. The first dose was followed by a profuse perspiration which lasted six hours. No disturbance of the stomach or nervous system. Pain in the joints rapidly relieved; patient slept well. February 15th, Salophen 3.0 Gm.; no change. February 16, daily quantity increased to 4.0 Gm., divided in six doses. Profuse perspiration, pains slightly increased, no disturbance of stomach. February 17, remedy continued in same dose, and some improvement manifested, but pains reappeared during the night, especially in the tibio-tarsal articulation. During the following days under same treatment, pains disappeared entirely.

CASE 3. P. R., female, aged 45, married; subacute rheumatism, swelling and pains in various joints, especially the ankle and knee. February 17, salophen 3.0 Gm., in six doses. The first dose produced some diaphoresis, but no improvement. On the following day, dose increased to 4.0 Gm., and same quantity administered until February 20, when the remedy was replaced by sodium salicylate, which effected a cure in four days. A recurrence of pains ensued, and the patient was readmitted March 21st. Under administration of salophen for several days, followed by iodide potassium, complete relief was obtained.

CASE 4. S. S., aged 26; entered Clinic March 29, 1893, suffering from pains and swelling in various joints, knee, ankle, hip and wrist, of subacute character. Salophen was administered for seven days, in doses of 4.0 to 5.0 Gm. daily, reduced to 3.0 Gm., and produced rapid improvement, reducing the temperature and relieving the pains and swelling. Afterwards the cure was completed with iodide potassium.

CASE 5 A. C., aged 22, male; had suffered from repeated attacks of acute articular rheumatism. Admitted to the Clinic May 12th, with severe pains in the

*Translated for THE MEDICAL AND SURGICAL REPORTER.

arms and shoulders due to the subacute rheumatism. Salophen administered 4.0 Gm. in five doses, at intervals of three hours. Pains relieved, slight diaphoresis, no digestive or nervous disturbances. The dose was increased to 5.0 Gm. daily, and after five days employment salophen was replaced by salicylate of soda which acted more energetically and completed the cure.

CASE 6. M. V., aged 29, female; admitted to Clinic June 23d, with subacute articular rheumatism of the joints of the upper and lower extremities, especially the elbow, wrist and knee. Pains and swelling were present. Salophen 1.0 Gm. every three hours was administered, the first dose being followed by prolonged sweating, but no digestive disturbance. On next day, daily quantity of the remedy was increased to 6.0 Gm. and pains relieved. The remedy was continued until June 28th, when it was replaced by iodide of sodium which effected a rapid cure.

CASE 7. S. A., aged 47, male married; had suffered from subacute articular rheumatism, with swelling of affected joints. Salophen 1.0 Gm. every three hours, and continued for one week afforded some relief of pains. Salicylate of sodium then substituted, and employed for about one month with fairly good results. Later iodide of sodium and Piperazine administered, but no complete cure obtained.

CASE 8. M. E., aged 35, admitted September 23rd, acute articular rheumatism of all the joints; pains, swelling and impaired mobility being present especially in left ankle and knee joints. Temperature 38° to 39° C. Salophen given for six days, in 1.0 Gm. doses five times daily, and decided relief of pains and reduction of temperature manifested after two days' administration. Salicylate sodium then given for three days, and patient left Clinic October 25th., perfectly cured. In this case also, salophen showed itself preferable to salicylate of sodium, and acted as an efficient antipyretic and diaphoretic.

The author's conclusions are as follows:

Salophen is an active anti-rheumatic, better tolerated than salicylic acid and salicylate of soda and more innocuous than salol. In severe acute and chronic rheumatic affections it is somewhat less effective than the salicylates, and its chief indication is in the initial stages of acute arthritic and in mild or subacute cases. In obstinate or chronic cases it is advisable to follow its administration with that of iodide of potassium. The antipyretic action of salophen is not marked. In the intestinal canal it acts as an antifementative, and it destroys the reaction of indican in the urine. Doses as high as 5.0 to 6.0 Gm. *pro die* continued for several days are not attended with disturbances of any kind. —*Terapia Clinica*, April 4, 1894.

Effect of Climate on the Development of Children.

This is the title of a paper by Dr. T. C. Duncan in a late American Climates, which is of interest to climatologists generally. In the course of the paper he observes that physicians, who have made special observations on the difference between American and English children, report that the latter are more substantial, thickset, and less bright and active. Dr. Duncan attributes this difference to climate; England being more rainy and cloudy, and America more sunny and drier. American children are certainly more nervous from our drier atmosphere. Much of the apparent great composure of the English child is, however, an inherited as well as an acquired and cultivated sociological trait, not at all dependent upon the climate. Association has here a wonderful contagious effect. We all know that gesticulations, shrugging of the shoulders, and facial mobility during conversation, are supposed to be peculiarly Gallic accompaniments, and yet we have repeatedly seen reserved and taciturn Americans—a kind of a cross between the solemnity of our Puritan fathers and the stolidity of a blackfoot or of a Sioux—grimace, gesticulate, curve his back and hump his shoulders, wink and blink like a Marseillese the moment he acquired a fluent use of Spanish. Americans residing in England soon become more sedate, and American boys educated in England or France soon acquire more staid actions as well as a more staid form of expression in their speech, without losing any of their brightness. The moister air of England or of western Europe tends, however, to giving American children a more substantial body; they round out better and are not as restless as they are at home.—*National Popular Review.*

THE MEDICAL AND SURGICAL REPORTER

ISSUED EVERY SATURDAY

HAROLD H. KYNETT, A. M., M. D.
Editor.

PENFIELD PUBLISHING COMPANY
Publishers.

Asbury Park, N. J.—1026Arch Street, Philadelphia, Pa.

TERMS:—Three Dollars a year, strictly in advance. Sent four months on trial for $1.00.

REMITTANCES should be made payable only to the Publisher, and should be made by Postal Note, Money Order or Registered Letter.

NOTICE TO CONTRIBUTORS:—We are always glad to receive articles of value to the profession, and when used they will be paid for, or reprints supplied, as the author may elect. Where reprints are desired, writers are requested to make a note of that fact on the first page of the MS. It is well for contributors to enclose stamps for postage, that the articles may be returned if not found available.

SATURDAY, AUGUST 11, 1894.

EDITORIAL.

USUAL PERIOD OF HEMORRHAGES IN PLACENTA PRÆVIA.

Having recently read that at a medical meeting the statement was made, "In central placenta prævia hemorrhage usually begins about the fifth month," and knowing it to be without any foundation in physiology or in facts, we have thought that quotations from some recognized authorities in obstetrics might assist in correcting the evil possibly arising from such publicly pronounced assertion.

Depaul, *Lecons de clinique obstétricale*, said that "the hemorrhage rarely occurs before the sixth month," and that "almost all hemorrhages from vicious insertion of the placenta, are produced in the last six weeks of pregnancy."

Charpentier states that the hemorrhages almost never occur before the sixth or seventh month.

"The losses show themselves at different periods. They rarely begin before the end of the sixth month, more often nearer the full period, and sometimes not until labor has actually commenced."—*Playfair.*

"Habitually the hemorrhage begins at the seventh or eighth month, and especially in the course of the ninth or tenth."—*Nægele and Grenser.*

"In lateral placenta prævia hemorrhages generally occur only after the thirty-second week, and in the central variety between the twenty-eighth and thirty-sixth week."—*Winckel.*

This author also states that there are cases in which the bleeding takes place in the first half of pregnancy, and others, not rare, in which, of both the lateral and central variety, the first hemorrhage appears only a few days before term, and in some instances as late as the beginning of labor.

Müller, in his monograph upon placenta prævia, the best of several upon this subject, observes that in the great majority of cases the bleeding first appears in the last weeks of pregnancy, especially in the last fifteen days.

Simpson's statistics, including 89 cases, furnish the following facts: First hemorrhage in 3 cases, before the sixth month; in 5, from 6 to 7 months; in 19, from 7 to 8; in 19, from 8 to 9; in 43, in the ninth month. Depaul's 70 cases give the following: In 1 case the hemorrhage occurred before the sixth month; in 7, from 6 to 7 months; in 12, from 7 to 8 months;

in 26, from 8 to 9 months, and in 24 at term, or near it.

So astonishing is the statement quoted as to when the hemorrhage usually occurs in central placenta prævia, we cannot believe any intelligent practitioner ever made it, but rather that the reporter has substituted fifth for seventh to eighth month.

ABSTRACTS.

THE ICE BAG AS A CARDIAC STIMULANT.

A writer in *La Medicine moderne* is quoted in *La Province medicale* for April 7, as saying that the application of an ice bag over the heart, according to Dr. Jullien, is a powerful therapeutic measure. It seems that in 1887 M. Jullien read in the *Gazzette delle cliniche* an essay on this subject by Dr. Silva, and was struck with the author's conclusions. Experimentation upon animals had shown the possibility of raising the blood pressure rapidly from a hundred and twenty millimeters to a hundred and seventy and even a hundred and ninety, and of diminishing the frequency of the pulsations considerably; and these results had been confirmed clinically. M. Jullien was not slow to verify these observations for himself. One day he was called to take charge of a patient with typhoid fever. He advised treatment by means of cold baths, and transferred the patient, a large and strong young girl, to the care of a colleague. Soon afterward, however, his colleague's illness rendered it necessary for him to take charge of the case again. It was a grave one and the febrile phenomena were intense. The elevation of temperature proved rebellious to the use of cold water. Soon there was a typical picture of the ataxoadynamic form of the disease. The patient had lost consciousness entirely and lay on the bed entirely uncovered in a tetanic attitude varied only by the certain spasms of the head. The temperature remained all the time above 104°; the pulse had reached sucessfully 120, 140 and 160. Under these circumstances M. Jullien fancied that the application of ice over the heart might constitute a last resort, and he made bold to carry it out. He admits that it was not without timidity that he placed the rubber bag on the region which scarcely showed the tumultuous and enfeebled beats of the exhausted heart. He watched the pulse closely, ready to stop the attempt at first signal of danger. But in less than fifteen minutes he saw the number of the pulsations diminish and their amplitude increase; in a short time the almost imperceptible undulations of the artery gave place to more decided elevations. Whenever he removed the refrigerant the alarming symptoms returned immediately, so that after many trials he concluded to leave the ice bag in place for several days. After that the temperature yielded, the cerebral phenomena disappeared, and the patient was out of danger. He is convinced that she owed her safety to the decisive measure which he had adopted. In another case also he accomplished a result equally remarkable by this means. In conclusion, he remarks that the beneficial effects show themselves in from fifteen to twenty minutes from the beginning of the application, and reach their maximum at the end of an hour. It is true, he says that they are evanescent; disappearing rapidly when the application is suspended, but there is no danger in prolonging it as long as the general condition remains precarious. In some cases, under its action, the height of the pulsation has been observed to be tripled, which means a pulse ampler, fuller, and more tense, with the subsidence of dicrotism, intermittence, and irregularity, and with a longer duration of the diastode. An interesting fact noted is that the effects of alcohol and those of atropine on the circulation are in a measure neutralized by the ice bag. This, says the author, is not astonishing, since alcohol has the property of lowering the blood pressure by paralyzing the vasomoter nerves, and atropine increases the frequency of the pulse by parlyzing the pneumo-gastric nerve. This antagonism, he suggests, may possibly be serviceable in some cases of poisoning.—*N. Y. Med. Journ.*

NARCOMANIA.

Experts and noted writers agree that this term describes more accurately the condition of many inebriates, than dipsomania. The latter indicates a thirst mania, which is very rarely seen, and of short duration, while narcomania is a mania for relief, or the intense desire for the anesthetic effects of alcohol, opium or any drug which will quiet the physical or psychical sufferings of the organism, and is common to most cases of alcoholism. An inebriate who has become powerless to control this alcoholic impulse, and who gives way to it continuously, or at intervals, is a diseased man requiring medical recognition and care.

Such men are what may be termed defectives, and in most cases are of bad judgment, weak, erratic, changeable feelings and morbid enthusiasts. Recently the prominence which a few men of this class have taken in the affairs of the country, bring up the question of their mental condition, and suggest a new study and change in public sentiment. A practical illustration is that of a business man, at the head of a large industry, who drinks to great excess at intervals, and whose bad judgment and insane-like reasoning has on several occasions caused great suffering to those whom he employs, and the community in which he lives. Lower down, a man who drinks at intervals has attacks of delusional mania and causes distress and suffering to those about him; or commits crime which perils the interests of the community.

Another class growing more prominent, are so-called reformed inebriates, who after years of excessive use of spirits, seemingly stop drinking, and become wild agitators, and sensational leaders of impractical theories. They call themselves pioneers, socialists, and are active to change and disquiet the existing order of events. They are prominent in all new schemes for money, power and popularity; and after an uncertain period relapse, and become wilder and more irregular. They are becoming prominent in every community, as supporters or opponents of every possible good or bad theory, quackery, delusion, socialism, anarchism, and are so-called reformers of every degree. As advocates of "gold cures," they have tried the treatment and then enter upon the business of curing others. Becoming officers of branch cures, they urge the most extravagant expectations in pecuniary returns, and possibilities of curing others. Later the institution is bankrupt, and they relapse and disappear. The head centers who provide the secret remedies, wisely receive all pay in advance, and never trust, while the credulous stockholders and supporters of these branch cures, trust to the pretensions of these reformed officers.

Many of the extreme reformers, who create a large following for a time, then disappear under a cloud, are of this class of narcomanics. Sometimes in medical circles these cases appear, urging some very startling innovations in remedies and treatment, or claiming some discoveries which threaten to change all existing order of events. Not unfrequently they pose as enthusiastic advocates of some half way proprietary medicines.

The general public overlook the fact that such cases are "border briers," and not unfrequently pass over into the realm of insanity, both acting and reasoning like insane men. In the interval they may pass unobserved in may circles, and be credited as of sound mind. But when they commit crime and become objects of study, a new chain of symptoms appears pointing out states of degeneration not noticed before. Physicians should enter upon this neglected field of psychical and obscure mental symptoms, and be able to make diagnoses of cases, that are seldom recognized until they fall into the hands of specialists. Narcomania is only one of many of these obscure degenerative mental disorders, which may go so far, then stop, or continue to some pronounced phase of insanity. An early diagnosis of a paranoiac and defective brain, and appropriate care and advice, would save most disastrous consequences later. So-called habits, conduct and methods of reasoning, should be the subjects of medical study as much as the heart's action, the temperature and reflex of the body.

The narcomaniac is diseased and requires medical care and treatment, and the general practitioner is in a position to study and understand these cases more clearly than the specialists.—*Jour. Am. Med. Ass.*

AN EASY METHOD OF BATHING IN TYPHOID FEVER.

Every new medical text-book and periodical accumulates statistics testifying to the brilliant results following the use of cold baths in typhoid fever. The hospitals in which this method is chiefly carried on are almost, without exception, showing a higher percentage of recoveries than ever before under any other plan of treatment.

Why is it, then, that this method is not universally adopted and carried out in private practice? The answer is simple.

Easy as it is in a hospital with an abundance of skilled assistance, there is no method of treatment in use so difficult to carry out properly as tubbing in typhoid fever in private families.

As the family bath-room is generally out of the question on account of its inconvenient location, and use by others of the household, it becomes necessary to buy a large portable bath-tub.

Even in cases where there are two trained nurses it is necessary to call in the clumsy assistance of some members of the family to help in the lifting of the patient to and from the tub, and this is a strain on them, and not unattended with risk to the one who is sick.

There is undoubtedly still a widespread opposition among the laity, both educated and uneducated, to the use of "cold baths" in fever. A young physician must have a very strong hold on the family, and enjoy their most complete confidence, to take the risk of the responsibility, if the disease takes a bad turn later from any accidental complications, and even older men will sometimes hesitate.

A physician of high standing and extensive practice in the city recently said to me, "I do not find that tubbing is practicable in private families, much as I would like to make use of it. I have to content myself with sponging and packs, and have had some success with constant use of an ice-coil over the abdomen as a substitute. If the ice-coil acts so well in lesions of the peritoneal coat of the intestines, why should it not have a similar result in lesions of the mucous coat?"

But all these three methods, sponging, wet pack, or ice-coil, while they add to the comfort of the patient, do not cause very decided or long continued lowering of the temperature.

Again, one who has had bad results from necessary changing of the position of a patient in an advanced stage of typhoid to examine the back of the chest, or something equally simple, causing disagreeable heart symptoms, will rather dread the process of lifting a patient out of his bed for any reason whatever, especially if the patient is large and the bed a double one.

The following method, which I once saw used in a hospital in Buffalo, commends itself as a simple solution of the whole problem. I have never seen it published in any medical journal or work, and am sure that it has not often been tried.

It is a very easy thing to slip a rubber blanket under the patient, and raise the two sides and the ends at the foot and head of the bed, nine or ten inches, by a row of pillows, bolsters, sand-bags, or simple boards.

The rubber blanket ought to be of double thickness, as large as can be purchased, and special care must be given to the arranging of the corners. When this is done you have the patient at the bottom of an impromptu bath-tub, into which you can pour water at any desired temperature, and in sufficient quantity to partially or entirely cover his body.

Only two inches of water would be enough to give a cool sponge-bath ten times as efficacious as the gingerly sponging possible under ordinary circumstances, and if the sides and corners are firmly fixed you can easily make this tub hold all the water you desire. The water may be run from the nearest faucet by a rubber tube. I have found it a simpler and equally successful method to carry it in pails and pour it over the patient, starting with tepid and gradually cooling it down to the desired temperature.

The neatest method I have found by experiment is to use a large "watering-pot" with a sprinkler, such as is used for watering plants. This is a method which will not commend itself to those who dislike humble and commonplace methods to accomplish something that more complicated and more impressive methods might do.

I believe this kind of a bath will always be grateful to the patient, and if it is found necessary to use water at a decidedly low temperature, would give rise to less shock than a sudden plunge into a tub filled with very cold water. The effect on the temperature is the same as it would be under the other method with a stationary tub.

The water can be removed, without spilling a drop on the bed, by siphoning with a rubber tube, or dipping with a small pitcher or cup, or sponging. Then the blanket can be dried and left in place, covered by a clean sheet, or better yet, removed and dried in the sun.

All this needs a little care, for it would be a very serious and troublesome accident to soak the patient's bed-clothing and mattress, but the difficulty and risk to the patient cannot be compared with that attending the use of the ordinary tub. And best of all, in those cases where the family or friends must do the work, and the employment of trained nurses is impossible on account of expense, this method can always be successfully used when tubbing would be out of the question.

I have not found one single objection to the employment of the method in private cases, and cannot see why it could not be used in hospitals.—*Med. Rec.*

Music as a Healing Power.

The idea that music possesses an actual healing power is about to be tested in London. The Guild of St. Cecilia is about to build or hire a large hall, in which musicians, especially trained to sing and play the very soft music which alone should be administered to those whose nerves are weakened by illness, shall perform by day and night. Telephones will connect this composite and continuous music-room with certain wards of London hospitals. Records and data of conditions and effects are to be kept, and conclusions arrived at. —*Medical Record.*

Puerperal Convulsions and True Epilepsy.

Paquy (*British Medical Journal*) recently read notes at a meeting of a society on a patient who was frequently attacked with epileptic fits. She became pregnant, and at a delivery had 119 fits. The temperature rose to over 102°. The diagnosis between puerperal eclampsia and epilepsy depends on the history and on the absence of albuminuria in simple epilepsy. Charpentier observed a similar case. An epileptic patient had convulsions during her first labor, became pregnant again, and died after a succession of fits during the fourth month. He agrees with Paquy as to albuminuria as a diagnostic factor.

Ocular Headaches.

Dr. F. D. Green (*The Refractionist*) concludes an article on headache as follows:

1. Many cases of headache are due to ametropia.
2. Many cases are due to heterophoria.
3. Never pronounce a case as due to ocular strain until the nose is examined.
4. Inquire into the condition of the stomach.
5. In females inquire concerning the condition of the genitals and whether there is constipation.
6. Migrane may be due to ametropia or heterohhoria, but frequently is not.

The Cold Bath the Best Antipyretic.

Numerous experiments have shown beyond room for doubt that heat production of thermogenesie chiefly takes place in the muscles. Heat production is of course most active during exercise, but is continually in progress under the control of the thermic centers of the brain and spinal cord. The fact that an application of cold to the surface reflexly induces an increased thermogenesis has been used as an argument against the cold bath as an antipyretic, but MacAlister's experiments show clearly that the prolonged application of cold to the tissues inhibits heat production by cooling the muscles, while it at the same time abstracts heat.—*Modern Medicine.*

SOCIETY REPORTS.

PHILADELPHIA ACADEMY OF SURGERY.

Meeting June 4, 1894.

Richard H. Harte, M. D., Surgeon to the Pennsylvania and Episcopal Hospitals, read a paper on

A CASE OF PYÆMIA DUE TO APPENDICITIS.

The history of the case I wish to present to you this evening is as follows: A. C., aged twenty-five years, a weaver by occupapation, was admitted to the medical wards of the Episcopal Hospital, May 9, 1894, at the request of his medical attendant, Dr. Ferguson, supposing the man to be suffering from abscess of the liver.

On admission the following facts were elicited, which I have copied from the Resident's meagre notes: *Family history*, negative. *Previous history*: Enjoyed good health, although not especially robust; about three years ago recalls having a short illness ushered in by a chill, the prominent symptoms of which were sharp cramplike pains referred to the lower third of the abdomen; was confined to bed for a week. (This was undoubtedly an attack of appendicitis.) *Present attack*: States that he was feeling perfectly well up to about two weeks ago, when he was awakened with sharp pains in the right iliac fossa, and in the course of the morning they were followed by a pronounced chill, succeeded by sweating; through the day he felt nauseated, and in the evening vomited.

During the interval of two weeks from the time of his first attack until his admission into the hospital, he had always once in the twenty-four hours, and sometimes oftener, a decided chill followed by profuse sweating; pain, referred in the right iliac, umbilical and hypochondriac regions was almost continuous; the bowels were watery, and moved daily; the patient was confined to bed and growing weaker.

After his admission into the medical wards all his symptoms were referred to the region of the liver, over which there was distinct tenderness. The daily chill and high temperature (106° F.) naturally led my colleague, Dr Morris on the medical side, to suspect abscess of the liver, and he transferred the case to the surgical wards for operation.

On the day after his transfer to the surgical wards I found the case very much as above stated, the right hypochondriac region being tender on pressure, liver area increased. On examining the case in the ward before operation I exposed but a small portion of the abdomen and noticed a distinct eruption which I supposed was due to the vigorous use of a scrubbing brush. The case was then taken to the operating-room and etherized, and on a more careful examination of the abdomen under an anæsthetic, I found the eruption, which I had first supposed was due to the bichloride and friction, to be pretty generally distributed over the entire trunk, and in appearance was not unlike the eruption of typhus fever, or, in other words, a distinctly morbilliform eruption. The history at that time in my possession was rather negative, and I decided not to operate until more definite data could be obtained. On the following day I saw the physician under whose care he had been and with my colleagues, Drs. Deaver, Neilson, and Morris decided to make an exploratory incision over the region of the liver. The patient was etherized, and an incision corresponding to the right semi-lunar line gave a free opportunity to explore the surface of the liver, which appeared normal. An exploration with an aspirating needle failed to reveal any purulent collections. The region of the appendix was explored through the abdominal wound, suspecting that possibly it might be the seat of the trouble; but with the hand carried down over the liver to the right iliac fossa, no evidence of trouble was apparent.

After the operation the chills seemed to be less severe, not being so frequent as before, and the temperature not rising high. The external wound closed quickly, and no symptoms relative to the operation were manifest. The next chill was four

days after the operation, and did not rise nearly to within two degrees of the height of the previous one. The next chill did not appear until the fifth day, although the patient was gradually growing weaker, and died on the tenth day after the operation. After the second chill he began to expectorate bloody mucus, sometimes a cupful of blood being expectorated during the twenty-four hours.

A post-mortem examination revealed the liver slightly enlarged and filled with a large number of metastatic abscesses, the principal pus collection and largest abscess being in the left lobe. The appendix was entirely destroyed, and its position occupied by a small pus cavity holding about three drachms of pus. The cæcum for several inches beyond its attachment to the appendix was gangrenous. There were some septic deposits in the lungs although no distinct infarcts were to be found. The reason I ascribed for the liver being affected, which is usually a secondary affection coming under the general circulation, is that the materies morbi coming from the appendix immediately entered the portal circulation—superior mesenteric vein—and consequently the first deposit would naturally be found in the liver.

The post-mortem here distinctly revealed a case of infection arising from the appendix. One peculiar feature in the case was the eruption, which was more or less misleading, although eruptions in suppurative fever, or pyæmia have long been recognized, and are spoken of by Braidwood in his exhaustive treatise on that disease.

My object in briefly reporting this case to-night, is that I think it of no little interest (without wishing to go into the subject of pyæmia, which is so familiar to all the Fellows of the Society), throwing as it does more light upon the much mooted subject of appendicitis, and again, adding its weight to the testimony that the above mentioned disease is strictly a surgical affection rather than a medical one; for I feel certain that had the true condition of affairs been recognized at the onset of the attack, the ultimate termination might might have been different.

DISCUSSION.

Dr. William J. Taylor: Some ten years ago I made a post-mortem examination for Dr. William Moss, of Chestnut Hill. At that time we did not know very much about inflammation of the appendix. There was a long-standing condition which was supposed to be an ulcerated condition of the bowel. It was undoubtedly due to inflammation around the appendix. There was also pyæmic abcesses throughout the liver. The patient, a boy fourteen years of age, had died of general pyæmia due to infection from his inflammatory condition of the appendix.

Dr. T. S. K. Morton: I have never met with pyæmia where abscess about the appendix was found, but I call a number of instances in literature where pylephlebitis had extended from the abscess cavity directly to the liver. I have seen one or two cases where intense jaundice accompanied this condition. One of these cases was in the practice of Dr. Steinbach. Here it was quite evident that the infection about the appendix had travelled by the lymphatic or venous route to the liver.

The President: Pyæmia associated with appendicitis must be a rare condition. I do not recall having seen it. I take it that those cases in which there is distinct evidence of involvement of the liver are essentially fatal.

Dr. L. W. Steinback: The case referred to was one of appendicitis in a young man. I saw him for the first time on the fifth or sixth day of the disease. Slight jaundice was present at the time of operation, but increased rapidly after the operation. The patient lived a week or ten days after the operation.

C. B. Penrose, M. D., contributes an article on the

USE OF THE ABDOMINAL DRAINAGE-TUBE DETERMINED BY BACTERIOLOGICAL EXAMINATION.

The subject of drainage in abdominal surgery is one about which there is still great difference of opinion, though this difference is much less than it was only a few years ago. Some operators never used drainage at all after any operations, and yet obtained exceedingly good results; while others obtained equal results, and their statistics showed that they employed drainage in a proportion of their cases, which varied, according to the individual taste of the operator, from 5 or 10 per cent. to 75 per cent.

The general advice given by the advocates of draniage was "when in doubt,

drain." It was this element of doubt which caused the diversity of practice. The doubting operators drained the most. Everything which increases our knowledge in regard to the facts which determine drainage dimishes our doubts and brings about more uniformity of practice.

We drain the abdomen for two reasons —for hemorrhage and for septic material. As the experience of the operator increases and his skill in enucleating tumors becomes greater he has less hemorrhage and, other things being equal, he drains less. Our methods of controlling hemorrhage in abdominal operations are better than they were a few years ago, the Trendelenburg posture enabling us to check bleeding from small vessels in the bottom of the pelvis, which before the introduction of this position required drainage. The operator who enucleates pelvic tumors with two fingers and closes the abdomen without seeing what he has done will necessarily have much more doubt in regard to hemorrhage and will use the drainage tube much more frequently than the operator who inspects the field of enucleation before closing the abdomen.

The second reason for drainage is the septic character of the material which escapes or is retained in the abdomen. Knowledge in regard to this fact is of great value in deciding about drainage in any case.

During the past winter, at the University Hospital, an immediate bacteriological examination has been made of the contents of every tubal or ovarian tumor which was ruptured during removal. And the report of the pathologist in regard to the septic or the aseptic character of the contents has determined my decision in ragard to the use of the drainage-tube.

I, unfortunately, have no record of the total number of cases in which such examinations have been made; but the results have been exceedingly satisfactory, for out of a series of 46 celiotomies, in which drainage was used but three or four times for hemorrhage, and only once because the microscope showed the material which escaped into the abdomen to be septic, there has been no case of peritonitis or sepsis.

The tubal contents in most cases of salpingitis are sterile. Shauta (*Archiv für Gynecologie*, 1893, No. 44) reports 192 cases of salpingitis, in 144 of which the contents of the tubes were sterile, in 33 there were gonococci, and in 15 streptococci or staphylococci.

Before I began to use this method of bacteriological examination I inserted a drainage-tube in every case of tubal and ovarian abscess where the contents escaped into the peritoneum. Now I neither irrigate nor use the draidage-tube unless the microscope shows these contents to be septic. The presence of gonococci in small numbers does not necessitate drainage. Recently the value of this bacteriological examination was illustrated by two cases operated on consecutively. Each woman had a tubo-ovarian abscess, caused by sepsis or labor. In each case the abscess was ruptured during removal, and the pelvis filled with pus. In the first the pus was found to be sterile, and I closed the abdomen without irrigation or drainage. In the second one pus contained streptococci and staphylococci and coli commune. Consequently, the pelvis was thoroughly washed out and drained.

Both women recovered without peritonitis or sepsis, though the convalescence of the first was very much easier than that of the second.

The examinations have been made for me by Dr. Beyea. Cover-glass preparations of the material to be examined are made and are fixed in the flame of an alcohol lamp, and stained with carbol fuchsin. The microscopic examination is made with a Leitz 1/12 immersion lens.

The examination is quickly and easily made, and I think that no operating room is completely equipped without facilities for such bacteriological examinations. They furnish us with scientific data from which we can determine the propriety of an important surgical procedure, which otherwise depends upon the whim or prejudice of the operator.

DISCUSSION.

DR. J. EWING MEARS: I think Dr. Penrose has made a very valuable contribution to the literature of this subject. I am reminded of some work of a similar character which has been done by Dr. L. McLean Tiffany, of Baltimore. At the recent meeting of the American Surgical Association, in the discussion on empyema, he stated it was his custom to submit the fluids removed from the chest cavity to bacteriological examination, and the ques-

tion of the kind of operation and washing out the cavity was determined by the result of this examination. The value of this work cannot be over-estimated. It enables us to make our diagnosis positive, and determines the character of treatment to be employed.

DR. RICHARD H. HARTE: I believe with Dr. Penrose that no operating room is complete without a suitable bacteriological plant. At the Pennsylvania Hospital, with the assistance of the pathologist and one of the residents, I have been trying to do some work of this character, and have derived a great deal of assistance from it. I notice in a number of operating rooms in new hospitals that a bacteriological room is also provided. A great deal of information as to the necessity for drainage can be obtained in this way.

CONVULSIONS AND RICKETS IN YOUNG CHILDREN.

A late Review of Insanity and Nervous Diseases contains an interesting translation by Dr. Kaumheimer, on the mutual relation of tetany, rickets, and laryngeal spasm or spasm of the glottis in childhood, something which deals with a subject that is not fully appreciated or understood until one is brought in contact with a case. Of the many works on diseases of children that are used as text-books, none contain as lucid or as graphic a description of this condition as the really classic work of West.

In these days of bottle-raised infants the disorders that arise from malnutrition, and which often drift into tetany and rickets from the latter cause, are more numerous than one might at first imagine. Kassowitz, in the above translated paper, observes that laryngeal spasm is found almost exclusively in children who present unequivocal symptoms of active rickets, and he finds it to be more prevalent in the winter and spring months. In this connection Kassowitz calls attention to the nervous disturbance found in rickety children, such as insomnia, localized sweating of the head, starting at slight sounds, expiratory apnea and spasm of the glottis, and generalized convulsions. The former symptoms precede the convulsions in rickets, and the family physician can not too urgently insist upon the need of a better general hygiene—which includes the very important and the all-powerful question of a proper diet—upon noticing any or being told of the presence of the premonitory symptoms that warn us of the danger of a general convulsion from this cause. In some children there is at the outset an hyperexcitability of the facial nerves, while in others we have observed a peculiar dry cough, such as ushers in the incipiency of Potts' disease of the spine.

In a general way a child is well under way in the disease before the parents consides its condition sufficiently important to call in a physician. In most cases the physician is really not called until violent convulsions have occurred. The physician may reach the patient during a convulsion, and it is then that he must bear in mind the connections that exist between laryngeal spasm and rickets and the condition he is called to attend. The parents and neighbors will have probably concluded that it is a case of worms, but in a case of convulsions due to rickets we must at once assure ourselves as to their real cause, as an entirely different plan of treatment must be pursued. Kassowitz places his main dependence on phosphorus. Cod-liver oil —not the emulsions, but the pure oil— administered both internally and externally, has proved a valuable remedy in our hands. West advises cod-liver oil and iron, careful dieting, and change of air. During the convulsion, cold—ice if procurable—applied to the head, and chloral with bromides are the appropriate remedies; at the same time the bowels should be freed of any irritation by enemata. As before said, however, the parents and the physician should at once look into the child's condition upon the first appearance of any of the premonitory symptoms that denote that the child is drifting into rickets, and not wait for a convulsion. The physician called when a child is in convulsions should well differentiate between the various causes that tend to produce convulsions, and he should be on the lookout for rickets.—*Nat'l Popular Review.*

CURRENT LITERATURE REVIEWED.

IN CHARGE OF ELLISTON J. MORRIS, M. D., AND SAMUEL M. WILSON, M. D.

ARCHIVES OF PEDIATRICS

for July. Dr. J. Henry Fruitnight writes of

Infantile Scurvy, Especially its Differential Diagnosis.

This trouble is increasing, especially among the more wealthy class, because the children are less frequently breast-fed than they are among the poor, and because it is becoming a custom to use prepared baby foods, sterilized milk, etc. The poor on the other hand have not money to waste on these preparations, and if a baby is not breast-fed it is given such a variety of tablefood that scurvy, at least, is not apt to develop.

Mr. Babes (of New York) investigating the histology of the disease, finds a lessening of the number of red corpuscles and a decided leucocytosis.

To show the symptomatology of the disease some clinical records are given. The first of these describes a child puny at birth, who was taken from the breast at the end of the first month, on account of the mother being phthisical. The child showed no evidence of this disease.

The child was fed on a "baby food" and failing in health was transferred to sterilized milk, but seemed constantly hungry, was given one artificial food after another and failed to improve. The mother noticed the child commencing to shrink from her daily bath, then that the left ankle was becoming tender, then that the right arm gave pain when moved. The gums now became swollen and dark, and then began to bleed when touched. Acute articular rheumatism and difficult dentition were diagnosed and treated without benefit.

When seen by the author there was a tense fusiform swelling at the left ankle joint, another at the knee, both very tender. Temperature was 100°, pulse feeble and rapid, gums dusky purple with unhealthy granulation tissue, cheeks and tongue ulcerated, ecchymotic spots over the limbs, abdomen, and back, and, over the right eye, a spot giving the appearance of a black eye. Blood was passed in the stools, but there was no diarrhœa.

Under treatment by Pasteurized milk prepared Freeman's method, and by orange juice ʒi every two or three hours and one and one half grains of the citrate of ammonium and iron every four hours, the child made a perfect recovery. The legs improved first, then the mouth, finally the ecchymoses were absorbed.

The second case had the typical appearance and the history of rickets. When seen the temperature was 103°, the thighs just above the knees were swollen and tender, unmovably extended and any attempt to move them caused an increase in the cries of pain.

A supparating haematoma due to subperiosteal effusion, was found posteriorly and above the right knee and burst the next day. Below the knee was an extensive lymphangitis. The gums were spongy, dark red, ecchymotic.

The child was given good cow's milk diluted with one-third oatmeal water, orange and lemon juice, twenty drops every two hours, and scraped apple pulp.

Citrate of potash 5 grains t. i. d. and citrate of iron and quinine 1½ grains, with dilute nitro-muriatic acid were given and rapid improvement resulted.

Another case resembled Pott's disease in many respects, showed weakness in sitting up and seemed to double up as though the spine were diseased and causing partial paralysis and she showed pain on being moved. This patient improved very promptly on being put on scorlutic treatment.

(TO BE CONTINUED.)

Dr. A. Leibert contributes an article on

The Filteration of Milk

which he read before the American Pediatric Society.

Mentioning the fact that milk contains many impurities, hair, dirt, etc., which are undesirable, and which sterilization would not remove, he had tried filtering. The filter chosen was absorbent cotton, and it was, as had been expected, quite effective, but to his surprise he found that the useful constituents cream, etc., were not removed at all, and not only this, but also that the number of bacteria was reduced very greatly.

A careful examination showed that if the cotton were first moistened, the number of bacteria would be reduced to about one-eighth of the number originally present.

To confirm these observations Dr. Otto Kiliam was requested to go over the same subject and he had similar results.

The experiments made are given at length and were quite conclusive.

Dr. J. L. Smith concludes his article on

The Alimentations of Young Children

giving the chemical changes taking place in lactose in milk in normal digestion, in alcoholic fermentation, as in flatulent dyspepsia and in butyric fermentation of putrefaction.

He describes the sanitary method of milking a cow and shows several points to be observed in sterilizing milk, and the injury resulting to the milk and to the infant using it if these points are not observed.

Finally he mentions the successful use in a foundling asylum of: six or eight drops of

essence of pepsin or elixir of digestive ferments, followed by one ounce each of dexterineized barley gruel and Pasteurized upper part of milk, every two hours for infants under two months of age. Every hour they are given ten drops of "Panopeptone." The upper part of milk means the upper third or half of milk that has stood for a few hours in a can.

Dr. S. A. Sutherland reports a case of

Cerebellar Tumor; Subsidence of Symptoms; Complete Recovery.

One week after a fall from a table, the patient, a boy 3½ years old, complained of headache, the pain beginning in the occiput and radiating to the vertex. The severity and frequency of attacks increased and finally violent screaming at night began. During a severe attack the head was stiffly retracted.

Double optic neuritis was found, staggering gait, and dragging of the limbs in walking, kneejerks markedly exaggerated, and in trying to grasp an object the fingers often became stiff.

An operation was not thought advisable. During the next two months the weakness increased, vomiting appeared, free epistazis, and complete loss of power of walking and of balancing. Then improvement set in and in one year he was in almost perfect health.

The treatment was cod liver oil and iodide of potash and afterward iodide of iron, but the author thinks that the cure was a spontaneous one, due to encapsulation of a tubercular neoplasm.

This number also contains a description by Dr. Edward Pisko of a case of "Scleroderma," and an Eulogy of Drs. John M. Keating and Charles Warrington Earle, by Dr. F. Forcheimer.

JOURNAL OF GENITO-URINARY AND CUTANEOUS DISEASES.

for July. Dr. Alexander W. Stein discusses

Exfoliation of the Mucous and Sub Mucous Coat of the Bladder Preceded by Renal and Vesical Calculus.

When cases of desquamation of the urethra are mentioned they are classed under such titles as "Membranous Urethritis," etc., but the author has seen cases where there was no apparent inflammation—where the urine was normal, and which showed no symptoms of general disturbance and yet where casts of the uretha formed, projected as dry masses, and could be withdrawn without much discomfort. Both of these patients had used strong astringent injections for gonorrhœa several months before.

A few writers casually mention a croupous or diphtheritic cystitis, but that the whole mucous membrane of the bladder could exfoliate has been denied. The author has found many records of the entire mucous coat being cast off and in some instances portions of the muscular and even a part of the peritoneal covering.

The epithelial cells of the bladder have greater vitality than similar cells elsewhere, yet we can easily understand that any mucous surface severely irritated, as by the use of strong urethral injections or by the presence of ammoniacal urine might exfoliate.

It is not unusual to find, at autopsies, submucous ecchymoses in the bladder, and the loose attachment of the mucous and deeper coats explains the frequency. A slough would readily follow an ecchymosis of any great extent, and this is favored by the poor blood supply directly in the mucous coat, most of the vessels lying in the muscular layer.

"Retention of urine" is generally given as the cause of most trouble of this description, and it is more than probable that this acted by compression of the blood vessels, both venous, plexus and arteries being mainly in the region of the bas fond. In fifty cases tabulated, forty-five were women and the trouble said to be due in these to either a retroverted gravid uterus, or to the pressure of the child's head. The author then gives the history of a patient of his who after passing several phosphatic calculi had litholopaxy performed, and although greatly relieved, began some time later to pass shreds by the urethra. Some of these were quite large, and on examination they proved to be the altered mucous and submucous coats of the bladder.

The case had been complicated by what was probably pyonephrosis and after passing out of the author's observation was reported to have died of uræmia.

Dr. Eugene Fuller continues his article on

Chronic Seminal Vesiculitis

by giving a number of cases treated by him. Some of these cases were purely gonorrhœal, some purely tubercular, and some probably due to gonorrhœa in a tubercular patient, and another seemed due to excessive coitus.

As soon as a case was found to be purely tubercular the local treatment was stopped. In a mixed case great care was taken to avoid increasing the tubercular element by too great manipulation, and of course while care was taken in a purely gonorrhœal case to avoid increasing the irritation still the local treatment was the main reliance.

Concluding the article Dr. Fuller impresses the fact that by no means all chronic gonorrhœas are due to seminal vesiculitis or will be benefitted by treating those organs, and that tubercular vesiculitis is so common that it is necessary to use great care even in the rectal examination, or many cases will only be aggravated.

He goes on to state that the discharge generally ceases before the cure is complete, the treatment usually varies from a month to possibly a year, and should be applied once in five or seven days, or, if it excites inflammation, a longer period may elapse before its repetition.

In the report of the eighth annual meeting of the American Association of Genito-Urinary Surgeons there is given the discussion of Dr. Chismore's paper on a modification of Bigelow's operation for calculus.

The enormous amount of cocaine the author uses excited much interest—as much as eight ounces of a four per cent. solution had been used without unpleasant consequences.

The paper will be published later.

PERISCOPE.

IN CHARGE OF WM. E. PARKE, A.M., M. D.

MEDICINE.

Relapses of Typhoid Fever.

Dr. Hugh M. Stewart of Guy's Hospital, London, contributes an article on this subject to the March number of the *Practitioner*, founded in a great part on the clinical histories of fifty cases observed in the hospital. He thinks that so-called relapses are genuine second attacks; that they are due to re-infection (infection in a fresh part of the intestine, always at a lower situation and usually in the large intestine) from the patient's own lesions; that constipation is an important predisposing cause of relapse; that relapses occur at a certain definite period—on the average, after an apyretic interval of a little less than six days for first relapses and a little over thirteen days for second relapses; that relapses are rarely fatal; and that they heightened the patient's immunity from subsequent attacks. While, as has been said, he regards constipation as an important predisposing cause of relapses, he intimates that it ought not on that account be treated, for the reasons that the prognosis in cases of relapse is good, that the recurrence of a relapse probably confers a higher degree of immunity than a single primary attack, and that treatment of constipation may excite a dangerous degree of peristalsis. Intestinal perforation is far less common in a relapse than in an original attack, partly because the infection is less profound, owing to the partial immunity occasioned by the initial attack, and partly because the large intestine, where the lesions of the relapse are prone to be found, is thicker-walled than the small intestine. Relapses run their course more rapidly than original attacks, as regards both lesions and symptoms, and this fact gives rise to the false appearance of all the lesions being of the same duration at the necropsy.—*N. Y. Med. Journal.*

Limitations of the use of Nitroglycerine in Chronic Nephritis.

Dr. D. D. Stewart states that, in his opinion, when it is desired to employ this drug over a considerable period of time for its effects on blood-pressure, the best rule of administration is to so proportion the dose that the intervals are comparatively short—never less than four times daily—and the amount, though sufficient to produce some subjective or objective effect, never more than that just necessary to cause the slightest feeling of fullness in the head or to slightly quicken the pulse. When a rather rapid increase seems necessary to maintain a constant effect, an equally important point is to temporarily discontinue the drug for two or more days, at intervals of two or three weeks. On its resumption a smaller initial dose will be required to produce physiological effects than that last taken.—*Thera. Gazette—Maryland Med. Journal.*

Poisoning by Guaiacol.

The external application of guaiacol for the reduction of febrile conditions has been given a prominent place in recent medical journalism. It is important, therefore, to direct attention to the toxic symptoms in the first fatal case of guaiacol poisoning.

Prof. Oscar Wyss, of Zurich, reports in the *Deutsche Medicinishe Wochenschrift*, of the case of a girl nine years of age, who had been accidently given 5 c. c (75 drops) of guaiacol. In a short time she became unconscious; the conjunctivæ became injected, the corneal reflexes diminished and the pupils no longer reacted to light; there were frequent attempts at vomiting and the saliva flowed from the mouth in large quantities. The pulse became rapid, the sensibility of the skin much diminished. Finally the patient began to vomit; the physician detected the odor of guaiacol. The stomach was washed out, but she did not rally. The cyanosis gradually diminished, and instead of it a deadly pallor was observed; the respiration became frequent. Three and a half hours after the guaiacol had been swallowed the patient had 100 c. c. of brownish-red urine.

The spleen and liver soon enlarged, and the temperature fell to 35.5°C. (96°F.) and small hemorrhages were observed upon the skin of the arms and legs. The urine contained albumen, blood and casts, and Ehrlich's carbolic acid test was positive.

Jaundice soon appeared, the stupor increased and the patient died on the third day.

The autopsy revealed an acute gastritis and enteritis, parenchymatous degeneration of the liver, acute hemorrhagic nephritis, parenchymatous degeneration of the heart muscle, and ecchymoses in the pleura, peritoneum, endocardium and pericardium. The spleen was much enlarged.

Kobert in his text-book on "Intoxicationen" points out that after one gram (15 drops) doses of of guaiacol slight appearances of poisoning may supervene. These are characterized by a burning feeling in the stomach, nausea, etc. In one case in which fifteen grams, (three and two-third drachms) were accidentally taken by a patient in the Dorpat Clinic, the stomach was immediately washed out and the patient was rescued. However, unconsciousness set in, the pupils became contracted, the breathing irregular and the intensely dark appearance of the urine was very noticeable.—*Omaha Clinic.*

Blood-Serum Therapy; Its Evolution and Present Status.

Dr. Carl Gunther (*Deutsch. Med. Wochenschr.*) The author gives a concise review of the blood-serum treatment and the princi-

ples which, at different times, were thought to control its action. The treatment depends upon the idea that the blood-serum of individuals who have artificially been made immune against a certain infectious disease, if introduced into the body of another individual, will develop healing properties or cause immunity from the disease in that person. Gunther describes the different processes by which the cultures can be weakened before being used for injections, and the different hypotheses as regards their action in the body, such as the hypothesis of retention and the theory of phagocytosis. He also mentions the destructive properties which blood-serum itself has on certain bacteria. The serum to be used in treatment can be preserved by the addition of ¼ per cent. of carbolic acid. Nothing definite is as yet known about the chemical substances present in the serum.—*American Medico-Surg. Bulletin.*

Severe Hiccough.

Heidenhain (*Berl. klin. Woch.*, June) remarks that this clonic convulsion of the diaphragm may be caused by direct or reflex irritation of the phrenic nerves. Reflex hiccough may be produced by diseases of the peritoneum, stomach, etc. Sometimes it is due to severe cerebral disease. It is observed before death from malignant disease of the intestine. A patient, aged 72, had a severe attack of hiccough five years ago, lasting five days, for which no cause could be found. In the present attack cocaine was given, with the best results, after other remedies had entirely failed. A few days after the attack all the symptoms of intestinal obstruction, including fæcal vomiting, appeared. Abdominal section was performed, and a large mass of growth was found arising from the tail of the pancreas, and surrounding the large intestine. An artificial anus was formed, but the patient soon died. In this case the patient seemed to be in the best of health until he had a slight attack of bronchitis. Five days later the hiccough supervened, and lasted eleven days. Seven days after the cessation of the hiccough intestinal obstruction manifested itself. The author thinks that the hiccough was the precursor of death from intestinal carcinoma. This disease could not, of course, account for the attack five years previously. Attention is drawn to the value of cocaine in this affection.—*British Med. Jour.*

Diagnosis of Appendicitis.

Edebohls (*Amer. Jl. Med. Sc.*) states that as a rule he has found it possible to palpate the vermiform appendix when not diseased, and in chronic inflammation to recognize distinctly the thickened appendix. He thinks that operation should not be undertaken in chronic cases unless the diseased appendix can be felt, nor in acute cases unless either the diseased appendix or the presence of a tumor can be detected. In acute appendicitis it may only be possible to localize precisely the appendix after anæsthesia, but information of much value as a guide to the point of incision may then be obtained. In searching for the appendix, the patient's knees are flexed slightly, and the fingers of the right hand are placed on the abdomen near the umbilicus. The fingers are then drawn from the umbilicus to the anterior superior iliac spine, firm pressure being exerted so that the resistant posterior abdominal wall and the pelvic brim can be perceived distinctly. The appendix is felt as a flattened ribbon-shaped structure when normal, as a more or less rounded and firm organ when thickened by past or present inflammation. The normal appendix exhibits no special sensitiveness, but when inflamed is more or less tender. The origin of the appendix lies generally an inch or half an inch outside the iliac artery, so that the line of the vessel (from the left of the umbilicus to the middle of Poupart's ligament) forms a useful guide to the appendix. Edebohl's observations were nearly all made in women. He found the cæcum empty in nearly every person examined. He has tested his method by observations made during laparotomy, in cases of both normal and inflamed appendix. —*British Med. Journal.*

Hypodermic Injections of Nuclein.

Dr. Victor C. Vaughan, who in common with other investigators has been testing the efficacy of the hypodermic injection of nuclein solutions in pneumonia, tuberculosis, etc., records his results in the *Journal of the American Medical Association*, as follows:

1. The subcutaneous injection of nuclein increases the number of white blood corpuscles.

2. This increase occurs in both healthy and tuberculous persons.

3. With like quantities of nuclein injected, the increase varies with the person. It may be slight, and it may be three-fold.

4. This increase occurs principally in the polynuclear cells.

It is evident as a rule as soon as the third hour after treatment and generally disappears after the forty-eighth hour.

If the nuclein shall prove of any value in the treatment of tuberculosis, it will most probably be due to the fact that they increase the polynuclear white corpuscles.

I have been using nuclein in the treatment of tuberculosis in man since May 1, 1893. At first I employed only yeast nuclein, but now I am using spleen nuclein in some cases. When sufficient evidence has been obtained either to reject or recommend the treatment, the results will be communicated to the profession. I may say, however, that only in initial cases may we expect any benefit, and even in regard to these I must have more abundant material and a longer experience before I can speak with any certainty.

Motion of Human Spermatozoa.

Various authorities state that the spermatozoa may continue to move during twenty-four to eighty four hours after death in the fluids of the seminal tract. Outside the body the movement of spermatozoa has been observed for seventy two hours by Hofmann and Mantegazza for four days at a suitable temperature. Mr. Piersoll now states that at a temperature of 8.5° C. a few of the elements showed movement, after being kept for nine days. These facts show that spermatozoa may long retain their vitality in the female generative tract and must receive in future due consideration in connection with certain medico-legal questions.—*Med. Rec.*

Electricity in Amenorrhœa.

Panecki (*Therap. Monatsh.*,) has found electricity, and particularly the faradic current, the most successful means of dealing with amenorrhœa. It is necessary that the poles should be introduced into the uterus and be allowed to act there. This treatment is well borne, and the current can be increased at each sitting, the number of the latter required averaging from five to thirty, and their duration five to fifteen minutes during successive days. The author's experience includes 18 cases in which the cure of the condition was established a year or more ago, the patients still remaining well. One of these, a married woman aged 31, had never menstruated though she was subject to periodical affections (severe headache, etc.) The treatment on various lines had extended over six years, but with absolutely no success. The author at the expiration of one of these periods commenced the application of the faradic current, and after twenty-eight successive sittings a small flow became apparent. During the following interval six more applications were made, and the patient is now well and relieved of all symptoms.—*British Med. Jour.*

Treatment of Mumps.

Dr. A. Martin (*Sem. Med.*). During a recent epidemic of mumps among soldiers, the author successfully resorted to the following treatment:

From the outset, he instituted buccal antisepsis, which, when rigorously done, according to his observations, diminishes the chances of testicular complication. He therefore had his patients gargle and cleanse the mouth as often as possible with solutions of thymol, carbolic acid, or very hot 4 per cent. boric-acid solution.

Besides, during the first days of the disease he administered antipyrine in daily doses of 2-3 grammes (30 45 grn.). This, he states, more rapidly effects the resolution of the inflammatory process than do sodium salicylate and other remedies; moreover, it acts more promptly on the fever and pain.

In orchitis caused by mumps, pilocarpine subcutaneously in doses of 1 centigramme (1-6 grn.) repeated once daily, is said to have promptly diminished the pain from the first evening on, and to have lowered the temperature, which became normal on the third day. The swelling of the testicle disappeared between the eighth and tenth days. After the acute period of orchitis was passed, the patient was submitted to a tonic treatment (cod-liver oil, nux vomica, cinchona extract, meat-powder, sulphur baths, etc.) for the purpose of preventing testicular atrophy.—*A. M. S. Bull.*

The Influence of Alcohol, Glycerine and Olive Oil on the Action of Disinfectants.

Lenti summarizes in the *British Medical Journal* the results of a series of researches as follows: (1) Alcohol in the absence of water neutralizes all bactericidal power on the part of sublimate or phenol with regard to anthrax spores, and the bactericidal action is not exercised until the dilution of the alcohol with water becomes greater than two per cent. in the case of 1 in 1000 sublimate solution, or than seventy per cent. in the case of carbolic acid. The length of time to which the spores were subjected to the action of the solution was twenty-four hours in the case of sublimate, and forty-eight hours in that phenol. (2) Glycerine has a similar impeding action, interfering with the action even of a 2 in 1000 solution of sublimate, if the proportion of water be less than forty per cent. In the case of phenol it is still more manifest. (3) Phenol and lysol dissolved in olive oil have no disinfectant action when tested as above. (4) In the preparation of a disinfecting fluid one ought, therefore, to avoid the addition either of alcohol, glycerine or fats.

SURGERY.

Trephining for Headache.

At a meeting of the New York County Medical Association held June 18th, Dr. J. Marshal Hawkes presented a patient, a young man, whom he had trephined for persistent localized headache. In Starr's recent work on "Brain Surgery," Dr. Hawkes said it was stated that this operation had been performed but twice for the purpose in question, once in London, and once in New York, by Dr. Robert F. Weir. From early boyhood this patient had suffered intolerably from frontal headache, and though he had consulted a large number of physicians, every remedy that had been tried had utterly failed to give him relief. Thinking that the trouble might possibly be due to eye strain, Dr. Hawkes first sent him to Dr. Knapp, but the latter found that there was no difficulty of this kind. On making an examination of the head, the only abnormality that could be detected was a slight indentation of the bone in the right frontal region. As a last resource, Dr. Hawkes determined to trephine at this spot, and on June 30, 1892, a button of bone, about

two-thirds of an inch was removed under strict antiseptic precautions. It was found that in the location named there was a depression of the inner table of the cranial bone, making pressure upon the brain substance, and the button removed was exhibited to the Association. From the time of the operation there had been complete relief from the headache, and as two years had now elapsed, the cure could be pronounced permanent.—*Boston Med. and Surg. Jour.*

Shortening the Round Ligaments.

Kellogg (*Mod. Med.*) has used this operation in over 300 cases in which the uterine appendages had been previously removed. Comparing it with the operation of ventral fixation, he finds its advantages to be as follows:—It supports the organ in a natural way, the traction falling upon the parts accustomed to it and able to bear it, being closely connected with the bony walls of the pelvis, instead of upon the yielding structures at the median line The operation is a safe one; the mortality is nothing. The operation involves no mutilation, no conspicuous cicatrix, no considerable amount of suffering, and has nothing about it of a frightful or repulsive nature. The time required for the operation, when a proper method is employed, is only five to fifteen minutes, according to the skill and experience of the operator, so that the patient is but a short time under the influence of the anæsthetic, involving very little risk of fatal consequences from this cause.

The failures have been less than five per cent. and were not due to any defect in the operation, but to the patient not undergoing the necessary treatment to remove the primary causes of retroversion.

The Bloodless Gradual Dissection Method of Amputation at the Hip Joint.

Dr. W. L. Estes has employed the following method in seven cases, with but one death, and considers it especially adapted to cases which necessitate very short flaps.

The first step in the operation is, by means of an Esmarch bandage, or by elevating the extremity, to force all the blood out, unless the extremity has been so crushed that this is impossible. Secondly, the femoral vessels are tied by double ligatures at Poupart's ligament, and the vessels divided between the ligatures. The rubber band may now be removed. Third, an anterior flap is gradually dissected up from without inward. Great care is taken to secure all known vessels before they are cut, by means of double ligatures or two hemostatic forceps, and all muscular or small branches when cut must immediately be secured. After the capsule is reached anteriorly, the posterior flap is dissected up with the same care as to securing the blood vessels. Finally the capsule is incised and disarticulation is accomplished after the usual methods. The essential feature of the operation is the securing of each vessel before it is cut or immediately after being cut. There is usually no difficulty in securing any vessel except the profunda and internal circumflex arteries. There is no oozing to speak of after this operation, and this feature makes it particularly valuable in very weakened or exhausted cases.

In none of these operations, except the second one and the one before the last, was there more than an ounce of blood lost, and on this account the author calls it the bloodless gradual dissection method.—*N. Y. Polyclinic.*

The Use and Abuse of the Bandage.

T. H. Manley, M. D., in the *Medical Summary:*

As a purely mechanical means of support in infantile or juvenile hernia, a bandage with the aid of a soft muslin pad is of more value as a therapeutic measure of relief and cure, when no complications are present, than any truss that ever was invented or operation devised. In pendulous, flabby abdomens, which permit of a constant strain on the mesenteric ligaments, or those produced by the gravid uterus, kidney or liver, great relief is experienced by the employment of the broad bandage or girth.

The first abuse of the bandage comes through its clumsy, unskilled application, by the inexperienced, hasty or careless. The second, through its too firm adjustment, when the circulation is impeded or as sometimes happens, it is totally strangulated, the tissues beyond becoming asphyxiated, mortified and destroyed. This latter, occurs most commonly, in cases of fracture. As many as five or six such cases have come under my observation in my time, and I have been informed of others, in which the bandage got in its deadly work, though they were frequently entered in the hospital-records as cases of "acute mortification." A fractured limb, which is at all firmly bandaged, should be closely watched, for the first twenty hours; until, in fact, the subsidence of primary inflammation and swelling and the bandage relaxes its grip. It often becomes a matter of great difficulty, to permanently adjust, widely separated fragments, without risking a firm bandage to fix them. These difficulties and dangers could be largely obviated if we would go back to the practice of our fathers; and, carefully adjusting the fracture leave it alone and not permanently "set" it until primary swelling has subsided.—*N. W. Lancet.*

Too Protracted Use of the Bandage.

We daily witness the weakening and atrophic muscular changes which a bandage may produce in that fashionable thoracic girth, commonly known as a "stays" or corset. The maternal binder after parturition, gives great comfort to the bruised, strained, fatigued abdominal muscles, but when too tightly applied or worn too long is

capable of doing mischief. We must then use discrimination, skill and judgment with the roller if we would derive the greatest good from it and avoid the unpleasant consequences to our patients or ourselves, which may attend its injudicious employment.

This is an age when almost nothing takes, if it does not smack of originality. The profession daily hungers and craves for something new; it must have a new coloring or be presented in a new dress, and it is greedily devoured, without our even hesitating for a moment, to determine for ourselves, whether it consists of anything more than a revamped, stale old shell, which may disorder and clog rather than impart vitality or energy.—*N. W. Lancet.*

Treatment of Gonorrhœa.

Dr. Edward Martin, of Philadelphia, after investigating different remedies and methods of treatment of gonorrhœa in a large number of cases, says: Concerning the conclusions which this series of observations seemed to justify, the following is a *resume:*

1. The abortive treatment of gonorrhœa by means of a ten-per-cent solution of nitrate of silver injections applied to the navicular fossa is advisable when the disease is seen in its earliest stage, that is, when inflammatory phenomena are absent, and when the symptoms consist in the slight, whitish discharge and tickling or moderate burning on urination, and when microscopic examination of the discharge shows that it is made up mainly of mucus and epithelium containing little pus. This abortive treatment is successful in an uncertain percentage of cases. When it fails it does not materially complicate the subsequent course of gonorrhœa.

2. When gonorrhœa is first seen in its florid stage, in addition to ordering rest, light diet, regular evacuation of the bowels, free drinking of plain waters, hot baths on retiring, alkaline diuretics, and the treatment appropriate to ardor urinæ and chordee, balsams should be given in full doses, and mild antiseptic irrigations or injections should be practiced at once. The most efficient balsams are sandal-wood and copaiba. These should not be pushed to the point of disordering the stomach.

He uses capsules, each containing:

℞ Balsam copaiba, Oil sandal-wood, āā..... m v.
Oil cinnamon..... mj.

Of these he gives six to twelve per day, administering them one hour after meals.

3. Irrigation of the urethra by means of hot antiseptic lotions gives better results than any other treatment. These should be continued either once or twice a day until gonococci disappear from the discharge or from the clap shreds found in the urine. They should be displaced by astringent injections.

4. When irrigations can not be employed, even during the florid stage, injections are indicated; these should be of bichloride of mercury 1 to 20,000 or nitrate of silver 1 to 10,000. These injections should be gradually strengthened as urethral tolerance is established.

5. Injections of nitrate of silver, 1 to 3,000, or bichloride of mercury, 1 to 1,000, or injection Brow, or any of the formulæ customarily used in practice in the increasing or florid stage of gonorrhœa, distinctly predispose to the development of hyperacute posterior urethritis, epididymitis, and other complications of gonorrhœa, and may aggravate and prolong urethral inflammation. Strong astringent injections employed in the early period of the subsiding stage are equally dangerous.

6. Treatment by internal medication alone is followed by a small percentage of epididymitis and posterior urethritis, but by slow cure. The most efficient treatment consists in the combination of the balsams with local antiseptic washings.—*Therapeutic Gazette.*

Etioloy, Pathology and Treatment of Carbuncle.

Dr. D. W. Graham, of Chicago (*The Journal Am. Med. Ass'n*), in dealing with this important subject, holds that it is in all cases a local disease, and due to micro-organism. The one generally found is the staphylococcus aureus. Sometimes the staphylococcus albus is also found. The coccus may enter through the hair follicles, sweat-glands, sabaceous gland ducts, or abrasions of the skin. The most that a cachectic condition of the body can do by way of etiology is to increase the vulnerability of the tissues. It is also a disease of middle life.

In its anatomy and pathology, it is related to osteo myelitis, parenchymatous abscess furuncle, and acute abscess. The differences in the clinical history and the methods of termination in the diseases of this group are due to the anatomic structure of the region or organ affected. The region frequently affected by carbuncle is the dense, firm, fibrous tissue over the posterior median line of the body. A true typical carbuncle can only happen in such parts of the body as permit of continued surgical tension in the inflamed tissues.

As to the treatment, the writer admits that much good may be done by making an incision into the inflamed part, or by the usual crucial incision. Parker's method of scraping out the inflamed tissue is a good plan. The injection of antiseptics into the swelling cannot be relied upon. The author's plan is to make a crucial incision over the tumour to points just beyond the diseased portion. The integument is raised, and the indurated tissue is then carefully dissected out. The wound is then dressed with some antiseptic. There is very little hemorrhage, and the wound heals rapidly without loss of integument, when the operation is done early.

Excoriations in Children.

In the *Progrès Médical*, No. 16, 1894, the following is also recommended:

Carbolic acid	(grs. xiv)	3.0
Powdered boric acid	(℥iv)	15.0
Powdered alum	(℥iv)	15.0
Precipitated carbonate chalk	(℥ivss)	150
Starch	(℥viij)	250.0

—*Pritchard.*

ANATOMY.

Landmarks of the Digestive Tract.

Dr. F. B. Robinson (*Mathews' Medical Quarterly*) says:

1. The sigmoid flexure is a very apt location for disease to arise. In dissecting infant cadavers I find the sigmoid very long and often lying in the right iliac fossa. In one infant, about six months old, I found a volvulus of the enormous sigmoid. The sigmoid and rectum are inseparable. In the sigmoid 60 per cent. of volvulus occur, and men have volvulus four times as often as women. I was unable to produce a permanent volvulus in experimental work on dogs' bowels. When I stitched it the volvulus would unwind and tear out the stitches or lengthen the pedicle. The cause of volvulus is (*a*) fatless, (*b*) elongated mesentery, and (*c*) a history of constipation.

The peculiar disease to which the sigmoid is liable is stricture (malignant or non-malignant). Seventy per cent. of strictures of the large bowel occur in the descending colon; and this would give a large number to the sigmoid, as the sigmoid is some fifteen inches long, and the descending colon proper is only eight inches long. No doubt the frequent stricture of the sigmoid is due to (*a*) the sharp and hard foreign bodies which lie on the sur face of hard fæces, and (*b*) the mechanical d ifficulty of passing through the long, curved gut. A curious feature about man is the sigmoid curve and the rectal ampulla, which must represent some ancient evolutionary stage. A peculiar feature I have long noted in autopsies is that the sigmoid and descending colon are frequently more contracted than the other portions of the large bowel.

2. The splenic flexure of the colon is peculiar from being the most fixed and most acute flexure of the digestive tract. It is held firmly in position by the costo-colic ligament. The sharpness of the bend in the colon at the spleen offers considerable mechanical difficulties to the passage of hard fæces, and this accounts both for malignant and non-malignant strictures at this point.

Rough hard fæces wound the mucous membrane and allow infection to travel through the gut-wall into the peritoneum, and this wound being kept constantly irritated results in inflammation or malignant growths. The inflammatory products organize into connective tissue, ending in contraction or stricture. Tumors and strictures are difficult to diagnose in the splenic flexure, as they are very high under the ribs, and in laparotomy for intestinal obstruction are often overlooked.

3. The hepatic flexure does not give rise to much intestinal disease. It is not an acute flexure, but possesses a very large angle. Its main difficulty is that it is near the gall bladder, which frequently gives rise to inflammation, and it spreads to the hepatic flexure. It is held to the liver by the hepato-colic ligament. Besides being an obtuse flexure, the fæces are not so solid as they are in the splenic and sigmoid flexures.—*American Lancet.*

BACTERIOLOGY.

Microbicide Properties of Mucus.

The presence of vast numbers of microbes in those cavities of the body which are in communication with the air would doubtless be the occasion for frequent and fatal attacks of illness were it not for the fact that the mucus which covers these exposed surfaces is possessed of distinct bactericide properties. Even germs as virulent and tenacious of life as are the spores of the anthrax, have been found to be killed after a few hours of exposure to nasal mucus. This product of gland-action is found to be capable of destroying all kinds of microbes. It is this protective action of mucus which prevents an enormous development of bacteria in the nose and other cavities of the body which are exposed to the air. This fact emphasizes the importance of preserving intact the much-neglected nasal mucous membrane, since it is evident that a state of disease capable of destroying the mucous glands, and hence vitiating the mucous secretion or causing its entire loss, must expose the body to attacks of disease from which it might otherwise escape.—*Modern Medicine.*

PHYSIOLOGY.

The Effects of Smoking Upon Muscular Work.

Prof. Vaughn Harley, M. D., M. C. P. and Grover Research Scholar, publishes in a recent number of the *Journal of Physiology*, the results of an extended series of experiments in relation to causes which influence muscular work. Among the various experiments undertaken by Prof. Harley, some of the most interesting relate to the influence of tobacco-smoking upon muscular work. The idea is generally prevalent among smokers that a larger amount of work can be accomplished under the influence of tobacco than without it,—at any rate, that smoking, even if it does not increase muscular power, lessens the sense of fatigue, and thus enables the individual to continue working longer than he otherwise could do. Prof. Harley's experiments had relation to two points:

1. The amount of work which could be accomplished; and—

2. The length of time during which work could be performed before the point of abso-

lute fatigue, with inability to continue work, was reached.

He found, as the result of his experiments, that even moderate smoking in a person accustomed to smoking so that the primary toxic effects of the nicotine were eliminated, the amount of work which could be accomplished was not increased, and that the approach of fatigue was not retarded. Tobacco-smoking, on the contrary, to use the words of Prof. Harley, "slightly diminishes muscular power and hastens the onset of fatigue."

GYNECOLOGY.

Intra-Uterine Electro-Therapeutics.

Intra-uterine electro-therapeutics (galvanism, faradism, or the sinusoidal current) skilfully, and patiently applied, deserves to remain at the head of gynecological conservative therapeutics.

1. Because it produces as a rule a symptomatic improvement which is oftentimes nearly equal to a cure. This is seen in its action on endometritis and the principal functional troubles. It is wonderfully efficacious in non-cystic tumors. It is often though not always useful in non suppurative peri uterine inflammation. It is useless in cystic collections of any kind whatever and in suppurative pelvic lesions.

2. In cases where it is of no value as a curative agent it may be of the greatest help in clearing up a doubtful diagnosis and settling the question as to whether or not an operation is desirable.

3 If its action is favorable, it frequently gives to sterile women the ability to conceive and bear children. In this connection electro-therapeutics is not hostile to surgery but on the contrary is a most important adjuvant to it, by pointing out clearly the indications for operation and also by completing what the latter has begun, but is not always able to finish—the entire restoration of the patient to health.—Dr. Apostoli in *Trans.-Journal of Electro-Therapeutics.*

CLIMATOLOGY.

The Physiological Effects of Mountain Climates.

Dr. C. T. Williams (London *Lancet*) says: The physiological effects of mountain climates, as shown on healthy or sick persons ascending from the lowlands, are briefly the following: The skin is tanned by the solar rays, and especially by the ultra-violet rays (Bowles); the circulation is at first quickened and the heart's impulse increased in power, but at the end of six or eight weeks the pulse rate becomes less rapid, and it eventually is slower than normal. Respiration is at first quickened, but coinciding with the pulse-rate becomes slower and also falls below the normal, the inspirations being deeper and the expirations (Ruedi) more complete. The quickening of the circulation and respiration is accompanied by thirst, by a reduction in the urea excreted by the kidneys but more carbonic acid (Marcet) and water are eliminated from the lungs, as might be expected from more oxygen being inhaled. Later, when acclimatization is complete, the normal amount of urea is again excreted, and the blood pressure increases. Coincidently with the slowing of the respiration, there is an extension of the thorax in several directions, causing an increase of the circumference measurements of from one to three inches, with increased mobility of the chest walls. All this points to greater physiological activity of the pulmonary organs, from the necessities of a rarefied atmosphere leading to greater development, and it must be noted that all mountain races have large and deep chests and are able to march great distances and to climb mountains with comparative ease. The effect of high altitude climates on healthy persons is excellent, and on most forms of phthisis it has been shown by my statistics to far surpass in results any other set of climatic agents. At the same time this is a two-edged weapon, and in many cases of disease, such as those of the heart, liver, and brain, and in emphysema and bronchitis, as well as in the case of the aged and of those with weakly constitutions, it must be avoided as most harmful. Finally, mountains are highly to be recommended as play-grounds for the mentally tired workers and for the young, who can rest their brains and work their muscles, and by inhaling pure, aseptic air may renew health and vigor and return to their duties refreshed as well as recreated.—*American Lancet.*

ARMY AND NAVY.

CHANGES IN THE U. S. ARMY FROM JULY 15, 1894, to JULY 28, 1894.

Leave of absence for two months is granted Captain Richard W. Johnson, Assistant Surgeon U. S. Army.

The leave of absence on surgeon's certificate of disability, granted First Lieutenant Frank T. Meriwether, Assistant Surgeon, is extended two months on surgeon's certificate of disability.

By direction of the Secretary of War, the order assigning Captain George McCreery, Assistant Surgeon, to duty at Fort Washakie, Wyoming, is revoked.

By direction of the Secretary of War, the order assigning Major Curtis E. Price, Surgeon, to duty at Fort Custer, Montana, is revoked, and he is granted leave of absence for one month to take effect, upon being relieved from duty at Fort Porter, New York.

CHANGES IN THE U. S. MARINE HOSPITAL SERVICE, FOR THE FOUR WEEKS ENDING JULY 21st, 1894.

Carmichael, D. A., Passed Assistant Surgeon; Granted leave of absence for thirty days, July 20, 1894.

Glennan, A. H., Passed Assistant Surgeon; to inspect unserviceable property, at Delaware Breakwater Quarantine, July 6, 1894

Bratton, W. D., Passed Assistant Surgeon; to report at Bureau for temporary duty, June 27, 1894.

Kinyoun, J. J., Passed Assistant Surgeon; to proceed to Cape Charles Quarantine, for special temporary duty, June 30, 1894; designated to represent Department at International Congress of Hygiene and Demography, July 9, 1894; to inspect unserviceable property at Boston, Mass., July 17, 1894.

Geddings, H. D., Passed Assistant Surgeon; to report at Bureau for temporary duty July 20, 1894.

Wertenbaker, C. P., Passed Assistant Surgeon; to proceed to Delaware Breakwater Quarantine for special temporary duty, June 30, 1894.

Young, G. B., Passed Assistant Surgeon; to inspect Quarantine Stations, July 20, 1894.

PROMOTION.

B. W. Brown, Assistant Surgeon, commissioned as Passed Assistant Surgeon, July 19, 1894.

NEWS AND MISCELLANY.

State Board of Medical Examiners of New Jersey.

A. K. Baldwin, M. D., president; Wm. Perry Watson, M. D., Secretary; A. H. Worthington, M. D., treasurer.

Wm. L. Newell, M. D., Millville, examiner in Materia Medica and Therapeutics.

F. B. Lane, M. D., East Orange, examiner in Chemistry, and in Eclectic Materia Medica and Therapeutics.

Wm. Perry Watson, M. D., Jersey City, examiner in Practice of Medicine, including diseases of the skin, nose and throat.

A. K. Baldwin, M. D., Newark, examiner in surgery, including surgical anatomy and diseases of the eye, ear and genito-urinary organs

A. Uebelacker, M. D., Morristown, examiner in anatomy.

E. L. B. Godfrey, M. D., Camden, examiner in Obstetrics and Gynecology.

Edwin DeBaun, M. D., Passaic, examiner in Physiology.

G. F. Wilbur, M. D., Asbury Park, examiner in Histology, Pathology and Bacteriology.

A. H. Worthington, M. D., Trenton, examiner in Hygiene and Medical Jurisprudence, and in Homœpathic Matera Medica and Therapeutics.

REQUIREMENTS FOR LICENSE TO PRACTICE MEDICINE AND SURGERY IN THE STATE OF NEW JERSEY. 1894-95.

All requirements for admission should be completed at least two weeks before examination.

They are as follows:

1. Evidence that applicant is more than 21 years of age.

2. Certificates of moral character from not less than two physicians in good standing, one of whom must be a resident of this State.

3. Candidates must be graduates from an accredited literary or scientific college, or have completed satisfactorily not less than a three years course in an a accredited high school or academy, or have received a preparatory education covering the following branches, viz: Orthography, arithmetic, English grammar and composition, geography, history of the United States, algebra and physics, as certified by the State Superintendent of Public Instruction of New Jersey.

4. Candidates must have "received a diploma conferring the degree of doctor of medicine from some legally-incorporated medical college (which in the opinion of said board was in good standing at time of issuing said diploma) in the United States, or a diploma or license conferring the full right to practice all the branches of medicine and surgery in some foreign country, and has also studied medicine four years, including three courses of lectures in different years in some legally incorporated American or foreign medical college or colleges prior to the granting of said diploma or foreign license; provided, however, that two courses of medial lectures, both of which shall be either begun or completed within the same calender year, shall not be considered to satisfy the above requirements."

First Exemption: Evidence of one year's service "as a member of the resident medical staff of any legally-incorporated charitable or municipal hospital or asylum" or of five or more years reputable practice of medicine and surgery may be accepted as equivalent to one year's study of medicine and surgery.

5. "All examinations shall be written in the English language, and the questions and answers shall be, except in materia medica and therapeutics, such as can be answered in common by all schools of practice; if the applicant intends to practice homeœpathy or electicism, the members of said board of those schools respectfully shall examine said applicant in the materia medica and therapeutics of the school in which such applicant intends to practice; the examinations shall be in the following subjects, namely, (Sec. 1.) materia medica and therapeutics; (Sec. 2.) obstetrics and gynecology; (Sec. 3.) practice of medicine, including diseases of the skin, nose and throat; (Sec. 4.) surgery, including surgical anatomy and diseases of the eye, ear and genito-urinary organs; (Sec. 5.) anatomy; (Sec. 6.) physiology; (Sec. 7.) chemistry; (Sec. 8.) histology; pathology; bacteriology; (Sec. 9.) hygiene; medical jurisprudence."

Second Exemption: "Applicants examined and licensed by or who are or have been members of state examining and licensing boards of other states, upon the payment of fifty dollars to the treasurer of said board and on filing with the secretary of said board a copy of his or her license or certificate, cerified by the affidavit of the president and sceretary of such board, showing also that the standard of requirements of said board at the time of said license or certificate was issued was substantly the same as that required by said board, and of his or her affidavit as to the personalty thereof, may be granted a license by said board without further examination thereby."